RAILROAD

RAILROAD

MAGAZINE

NOVEMBER

50 CENTS

Rails Across the Great Lakes

Exciting Days and Nights on the Train Ferries

Build a Spare-Time Business That Brings in

BIG MONEY Every Month!

Add $217 to Your Income Next Month!

We Furnish Everything FREE!

How'd you like a steady spare-time business bringing you cash profits every month . . . as much as $217 EXTRA income on just 2 easy sales a day? I want to put this exciting business right in your hands, as I have done for thousands of others . . . and you don't have to spend one cent! **I also want to send you valuable Bonus Prizes for doing a good job!**

Here's why this is the perfect spare-time business for you:

- No investment . . . now or ever.
- No overhead . . you make 100% profit on every order you take!
- You sell Nationally-advertised products not handled by stores . . . they will be available **only** from **you!**
- You feature fast-selling Mason shoes and jackets . . . apparel that EVERYBODY needs.
- You make a generous profit on each sale and have a chance to earn **extra** Bonus Checks each month . . . plus expensive prizes!

Start as soon as you receive my powerful Free Sales Kit. Many men with no previous experience have made $20 the very first day with this Outfit, introducing our quality products to friends, relatives, fellow workers. You'll be amazed how quickly they buy from you! Here's why:

1 You show a selection of **174 different styles** in dress, sport, work shoes for men and women . . . plus a complete line of jackets!

2 You can fit almost **everybody**, because you feature an amazing range of sizes (2½ - 15) and widths (AAAA - EEEE)!

3 **You draw on our huge stock of 200,000 pairs.** That means you're never "out" of a style, size or width. You beat store competition all hollow!

4 **You feature our exclusive Velvet-eez foamy-soft AIR CUSHION INNERSOLES** . . . a blessing for people who work on their feet . . . like "walking on air"! (Velvet-eez shoes bear the famous Good Housekeeping Seal.)

5 You feature such exciting styles as the fast-selling **shoe & jacket combinations** pictured above. You'll make double profits on each combination you sell!

To start this exciting business **right away,** mail the coupon **now.** I will rush your powerful FREE Sales Kit that contains **everything** you need to start making money the very first hour! I'll also show how you can win exciting Bonus Prizes. Start making as much as $217 **extra** a month . . . rush your coupon TODAY!

$20,000 EXTRA in Bonus Prizes!

To celebrate our Golden Anniversary we are giving costly gifts to Mason men who do a good selling job. There is a prize for practically EVERYBODY! Full details on how much YOU can win will be sent with your Free Sales Kit.

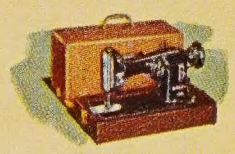
HAPPINESS TOUR FOR 2 THROUGH FLORIDA!

6 TAPPAN HOLIDAY RANGES!

24 ROTISS-O-MAT ELECTRIC ROTISSERIES!

12 COCKER PUPPIES, CASE OF IDEAL DOG FOOD!

6 COLUMBIA TRU-FIT $200 DIAMOND RING SETS!



PFAFF DIAL-A-STITCH SEWING MACHINE!

Richard Automatic Gold Watches! ★ Set of **Encyclopedia Britannica!** ★ 11 Piece **Flavor Seal** Cookwear Set! ★ **London Staplers** Made-To-Measure Suit! ★ **Kingston** Vacuum Cleaner Set! ★ **Shopmaster** Power Tool Set! ★ 100 **Eveready** 3-piece Flashlight Sets! ★ 360 **Universal** Pen, Pencil Sets with INK-N-TROL Ball Pen! ★ 100 **Inner Sanctum** Billfold Sets! ★ 100 6-month supplies **B.V.D.'s!**

These are just a few of the exciting prizes! Rush your coupon NOW!

MASON SHOE MFG. CO. Dept. MA-479
Chippewa Falls, Wisconsin

RUSH FOR FREE SALES KIT!

Mr. Ned Mason, Dept. MA-479
Mason Shoe Mfg. Co., Chippewa Falls, Wisconsin

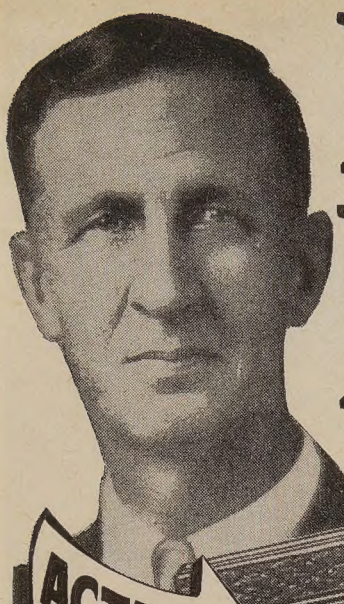
You bet I want a business that brings in exciting cash profits every month! Rush my money-making FREE Sales Outfit, so I can start earning $217 EXTRA income in spare time. Also rush details on how I can win valuable Bonus Prizes!

Name_____

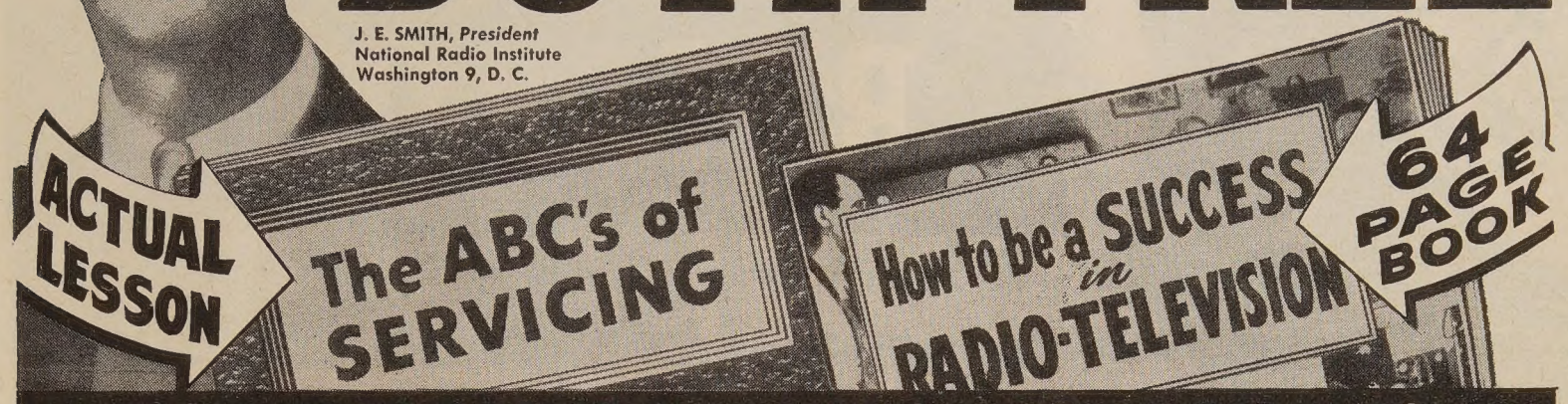
Address_____

Town_____ State_____

I Will Send You BOTH FREE



J. E. SMITH, *President*
National Radio Institute
Washington 9, D. C.



See How I Train You at Home in Spare Time for Good Pay Jobs in RADIO-TELEVISION

You Practice Broadcasting *with Equipment I Send*

As part of my Communications Course I send you kits of parts to build the low-power Broadcasting Transmitter shown at left. You use it to get practical experience putting this station "on the air," to perform procedures required of broadcasting station operators. An FCC Commercial Operator's license can be your ticket to a better job and a bright future. My course gives you the training you need to get your license. Mail coupon below. See in my book other valuable equipment you build and keep.

You Practice Servicing *with Equipment I Send*

Nothing takes the place of PRACTICAL EXPERIENCE. That's why NRI training is based on LEARNING BY DOING. You use kits of parts I furnish to build many circuits common to both Radio and Television. With my Servicing Course you build the modern receiver shown at right. You also build an Electronic Multitester which you can use to help fix sets while training at home. Many students make $10, $15 a week extra fixing neighbors' sets in spare time, starting soon after enrolling. I send you special booklets that show you how to fix sets. Mail coupon for 64-page book and actual Servicing Lesson, both FREE.

TRAINING plus OPPORTUNITY is the PERFECT combination. The sample lesson I send will prove to you that it is practical to keep your job while TRAINING right in your own home for better pay and a brighter future. My 64-page book should convince you that Radio-Television is truly today's field of OPPORTUNITY.

TELEVISION MAKING JOBS, PROSPERITY

Radio, even without Television, is bigger than ever. 115 million home and auto Radios create steady demand for service. 3000 Radio stations give interesting, good pay jobs to operators, technicians. NOW ADD TELEVISION. 25 million Television homes and the total growing rapidly. 200 Television stations on the air and hundreds more under construction. Color Television soon to be a reality. Government, Aviation, Police, Ship, Micro-wave Relay, Two-way Communications for buses, taxis, trucks, railroads are growing fields providing good jobs for men who know Radio-Television. All this adds up to good pay now, a bright future later for men who qualify.

START SOON TO MAKE $10, $15 A WEEK EXTRA

An important benefit of Radio-Television training is that you can start to cash in fast. Many men I train fix neighbors' sets, make extra money, starting soon after they enroll. Multitester built with parts I send helps locate and correct set troubles. Read at left how you build actual equipment that gives you practical experience, brings to life what you learn from my lessons.

MEN OF ACTION NEEDED MAIL COUPON TODAY

Act now to enjoy more good things of life. Get the benefit of my 40 years' experience training men at home. Take NRI training for as little as $5 a month. Many NRI graduates (some with only a grammar school education) make more in two weeks than the total cost of training. Find out about this tested way to better pay. Mail coupon below today for Actual Lesson and 64-page Book—BOTH FREE. J. E. SMITH, President, National Radio Institute, Dept 4NR4, Washington 9, D. C. OUR 40TH YEAR.

I TRAINED THESE MEN AT HOME

"Started repairing Radios six months after enrolling. Earned $12 to $15 a week, spare time."—ADAM KRAMLIK, JR., Sumneytown, Pennsylvania.

"I've come a long way in Radio and Television since graduating. Have my own business on Main Street."—JOE TRAVERS, Asbury Park, New Jersey.

"Answered ad for Radio and Phone Serviceman. Got the job. Within a year my pay increased 50%".—CHURCHILL CARTER, San Bernardino, California.

"Am with WCOC. NRI course can't be beat. Passed exam for first class Radiophone license with no trouble at all."—JESSE W. PARKER, Meridian, Miss.

"Am with WNBT as video control engineer on RCA color project. Owe a lot of my success to your textbooks."—WARREN DEEM, Malverne, N. Y.

AVAILABLE TO VETERANS UNDER GI BILLS

Good for Both-FREE

Mr. J. E. SMITH, President, Dept 4NR4
National Radio Institute, Washington 9, D. C.

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City..... Zone..... State.....

VETS write in date of discharge.....

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Comes in Tan, Black or Waterproof Finish

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Please rush a pair of genuine Paratroop Boots. In tan ( ) black ( ) or with heavy oil finish ( ) Check ☐ Money Order ☐ for $12.87 is enclosed.

Name.....

Address.....

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Boot size and width.....
(Specify size and width of your former GI Army shoe or your most comfortable dress shoe.)

AD-10

The Magazine of Adventurous Railroading

Vol. 65, No. 3 NOVEMBER, 1954 50 Cents

Front Cover: **THE ROUNDHOUSE BEANERY** *by Ralph Gross.*

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Change of Address: Postmaster—Please mail Form 3579 notices to Railroad Magazine, 205 East 42nd Street, New York 17, N. Y. Published monthly by Popular Publications, Inc., at McCall Street, Dayton 1, Ohio. Editorial and executive offices, 205 East 42nd Street, New York 17, N. Y. Henry Steeger, President. John J. McVarish, Treasurer. Entered as second-class matter at Post Office in Dayton, Ohio.

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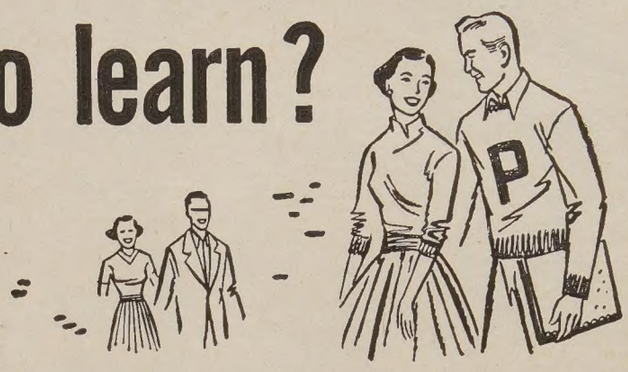
Are you too old to learn?



not at all, new tests show!

EXPERT SAYS YOU CAN LEARN NEW TRICKS!

New tests, cited by an expert in news stories, show that: your ability to think increases with age; your powers of deduction are greater; your judgment is better.

I. C. S. KNEW IT ALL THE TIME! In the I. C. S. files are thousands of case histories of men and women of every age. Their successes, their promotions, their raises prove that men and women past school age can learn! Listen to A.L.G.* "Up until I took the course, I did what I was told. But now . . . I tell others what to do."

I. C. S. GIVES YOU EXPERT GUIDANCE FREE! Do you have the feeling you're "stuck" in your job? Your trained I. C. S. counselor will appraise your abilities, help you plan for the future. Listen to D.F.K.* "Before enrolling, I was a foundry laborer. Today I am a draftsman, enjoying a ⅓ increase in salary."

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City_____ Zone_____ State_____ Working Hours_____ A.M. to P.M._____

Occupation_____

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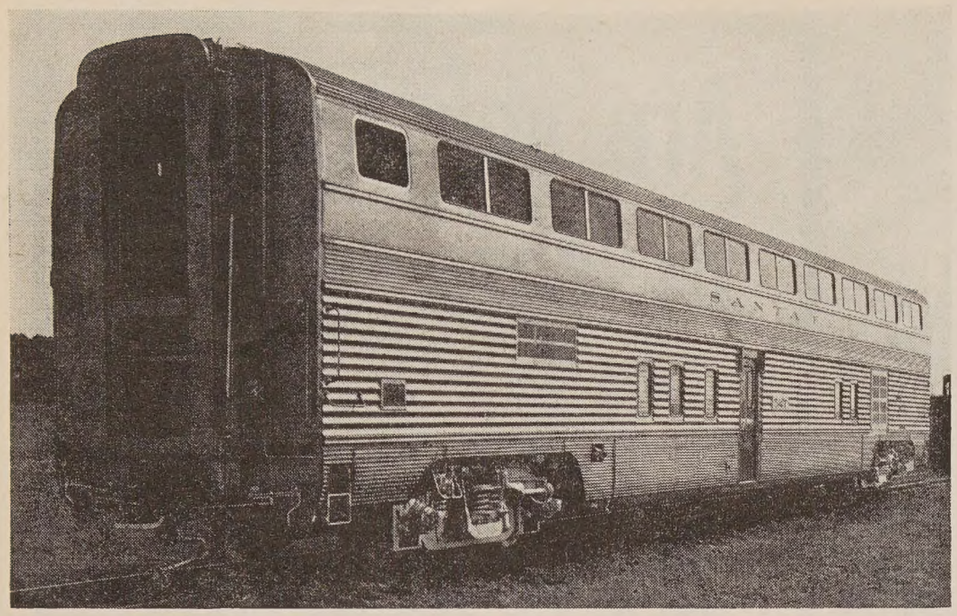


NEITHER A VISTA DOME CAR nor a double-decker of the Long Island pattern, but a blend of both, is this new type "Hi Level" coach that the Santa Fe is testing on its *El Capitan* runs. Upper section is devoted entirely to chairs for passengers; lower section has baggage storage space, rest rooms, and service equipment. Each car seats 67 passengers as compared with 44 to 48 in ordinary streamlined equipment.

MAIL CAR

Running Orders, Waybills, and Sandhouse Gossip—from Railroaders, Railfans, and the Editorial Crew

GIRL IN A MILLION. Barbara Parker, a beautiful 23-year-old British Railways clerk at Ipswich, England, was recently elected railway queen of four counties. A reporter asked:

"What does your boy friend think of this?

Barbara smiled. "I have no boy friend. I prefer locomotives to men." •

OLDEST active trainmaster on any road is said to be C. A. McHugh of the Pittsburgh & West Virginia, who has been railroading ever since he hired out as a freight brakeman in 1900. One bright spot in his memory is the first passenger train rolling out of the Wabash "Palace Depot" at Pittsburgh in 1904, bound for the glittering St. Louis Exposition.

"It was a wonderful day," he recalls, "and we were proud of that train."

Alert and spry, the veteran T.M. is not planning to retire soon. "My wife doesn't mind me still working. She says that as long as you keep your health, go ahead. It's better than hanging around the house with nothing to do." •

NEW BREAKFAST idea is being tried out by the Pennsy on its 8 A.M. "clocker" train from Philadelphia to New York. Besides breakfast in the dining car, a special diner-lounge next to it features a new low-priced continental type breakfast—a lighter meal with less formal service. •

NINETY THOUSAND track miles of America's busiest main line railroads are now laid with "cancer-free" rails made since 1936 to specifications developed at the University of Illinois. The rails are "cancer-free" because made with controlled cooling, an idea proved at Illinois to prevent the most common cause of rail breakage in earlier decades of the century.

Any rails with failures that might be "cancers" are sent to the University of Illinois for examination. Cure of "rail cancer" saves the railroads two million dollars or more a year in rail replacement cost alone, to say nothing of damage and dangers from rail failures. The research to find the cause and cure was financed by the railroads and steel mills. It cost a half-million dollars. •

DURING the burial of Britain's King Edward VII in 1910, all trains in the British Empire and Canada were ordered to come to a full stop.

"I received a similar order Sept. 16, 1901," recalls L. H. Jones, 319 Montgomery S., Bremerton, Wash. "As a Toledo, St. Louis & Western (Clover Leaf) engineer, I was pulling a westbound extra from Charleston, Ill., to East St. Louis when I received a flimsy reading somewhat as follows:

All trains will come to complete stop between 2 pm and 2:05 pm while body of President McKinley is being lowered into grave.

"The division superintendent—K. A. Goehring, I think—signed it. We stopped between passing track switches at Donnelson, Ill. I have often wished I had kept my copy of that order."

Who can tell us about another unusual train order? •

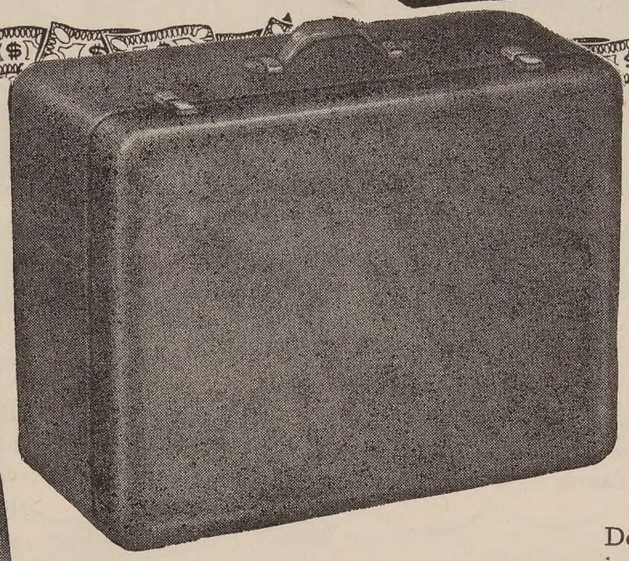
110 MILES per hour made by Tom Clark many years ago with the steam-powered *Coronation Scot* in England was a great record but not a world record, comments Bernard Daw, 265 E. 326th, Willoughby, O.

"Charley Hogan rolled up 112.5 with the *Empire State Express,* engine 999, on May 10, 1893," he reminds us. "Hogan's record is considered official because his run was officially supervised. And in 1905 the *Pennsylvania Special,* engine 7002, covered three miles at an average of 127.1 mph past Coalesworth tower in Ohio on the old Pittsburg, Fort Wayne & Chicago.

"I have a friend whose father, Ham Pickard, was a famous runner on the old Lake Shore & Michigan Southern. In 1905 he received 30 brownies (demerits) for hitting Buffalo yard limit at 105 mph." •

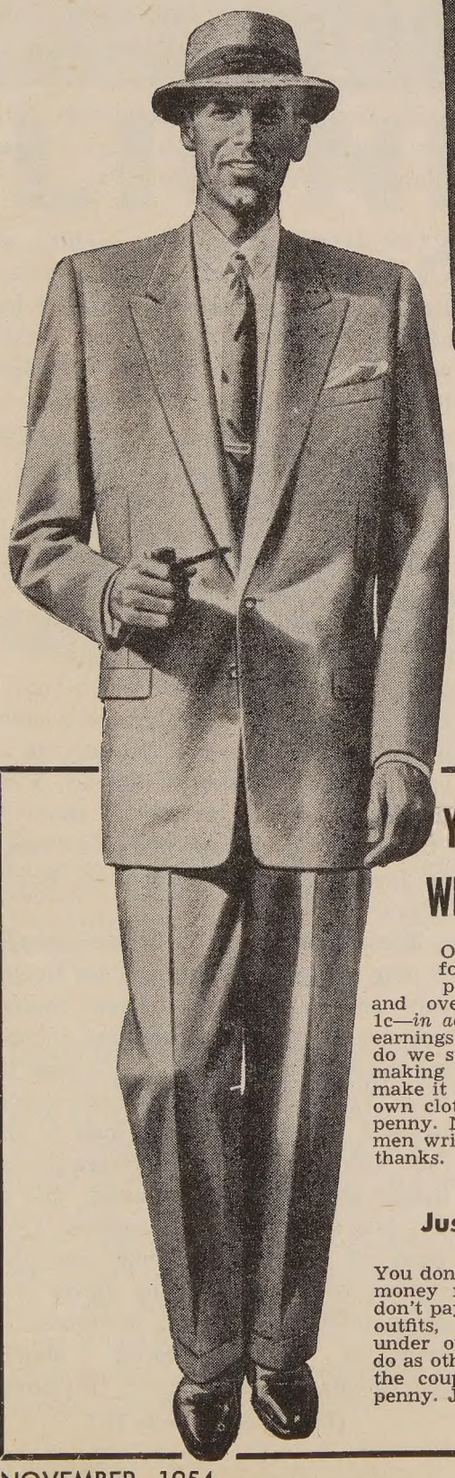
DAVID EDWARDS' article, "The 6264 Comes Through" (Aug. issue), gives the impression that the diesel is top dog on the Southern Pacific's Donner line, according to G. E. White, Box 454, Lovelock, Nev. "I grant that the EMDs are doing a fine job in pushing tonnage over the hill," he adds, "but I can cite instances where the AC 4-8-8-2 had to rescue diesels. A few months ago, for example, the steamer helped the *City of San Francisco* after her diesel power had

Men! Send for This Money-Making Outfit *FREE!*



See How Easy It Is to Make UP TO $30.00 IN A DAY!

Do you want to make more money in full or spare time . . . as much as $30.00 in a day? Then mail the coupon below for this BIG OUTFIT, sent you FREE, containing more than 100 fine quality fabrics, sensational values in made-to-measure suits, topcoats, and overcoats. Take orders from friends, neighbors, fellow-workers. Every man prefers better-fitting, better-looking made-to-measure clothes, and when you show the many beautiful, high quality fabrics—mention the low prices for made-to-measure fit and style—and show our guarantee of satisfaction, you take orders right and left. You collect a big cash profit in advance on every order, and build up fine permanent income for yourself in spare or full time.



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It's amazingly easy to take measures, and you don't need any experience to take orders. Everything is simply explained for you to cash in on this wonderful opportunity. Just mail this coupon now and we'll send you this big, valuable outfit filled with more than 100 fine fabrics and everything else you need to start. You'll say this is the greatest way to make money you ever saw. Rush the coupon today!

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Name.....Age.....

Address.....

City.....State.....

failed. Steam is on the way out, but until the last fire is banked the AC 4-8-8-2 will be there to take up the load when the chips are down." •

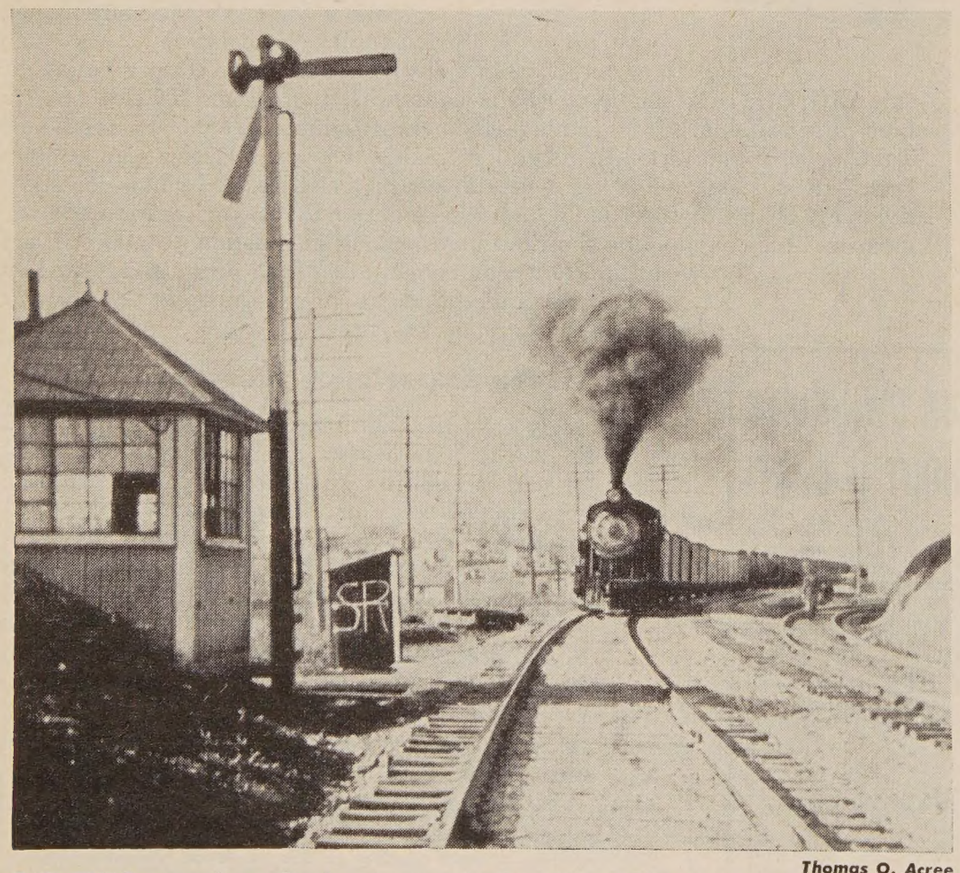
WE ACCEPT with thanks the offer of R. H. Kindig, 3831 Perry St., Denver, Colo., and E. J. Haley to check the accuracy of true tales and articles on Colorado roads before we print them. The offer came in connection with Bill Dooley's true tale, "Smoking Over the South Park" (Aug. issue). It seems that Bill's memory for geographical facts is not as keen as it used to be. The oldtimer confused Boreas Pass with Tennessee Pass, he mislocated Alpine station, and he called a certain mountain "Montevista," a name not used today. Says Mr. Kindig: "It's an enormous job for the *Railroad Magazine* staff to check on each and every item intended for publication. As for the Colorado material, if our own fairly comprehensive resources should prove to be inadequate, we are sure that other members of the Rocky Mountain Railroad Club will help out." •

BOTH Dooley's tale and E. S. Dellinger's "Flood on the Horny Toad" (Aug. issue) recalled family history for William F. Barr, 436 Capital Ave. S.W., Battle Creek, Mich., who writes:

"While I've never been to San Marcial, N. M., or seen the old South Park Line in Colorado, they are very real to me. My grandfather, P. F. Barr, figured prominently in the building of the South Park as locating and construction engineer. Wherever he went, he took his family with him. My father was also a railroad man—ticket agent, car checker, etc. I often heard him speak of the South Park and also of San Marcial, where he lived as a boy while my grandfather was a division superintendent.

"Grandpa designed the super's residence. The railway built it for him to live in while he rebuilt the Rio Grande Division from Albuquerque to El Paso, to locate and construct the Magdalen branch, and to widen the narrow-gage line between Deming and Silver City. One of my prized possessions is grandpa's scrapbook containing the last employes' timetable for the Rio Grande Division while he was with the Santa Fe, dated July 4, 1886.

"Even in those days, my father told me, San Marcial had flood trouble. On several occasions the water was too deep for Grandpa to walk through and he'd have a man drive him to and from his home in a buggy." •



Thomas O. Acree

OLD-TIME signal methods are recalled in this 1914 photo of block office near Durand, Va. Approaching trains were guided by operator who worked block signals by pulling short ropes which hung from levers on wall of building.

"I NOTICE readers' letters complaining of too much or too little electric lines, fiction, technical material, etc.," says John Collins, Jr., 95 Devon Rd., Rochester 19, N. Y. "They should know that a magazine intended to be read by a lot of people with varying viewpoints must have variety in its make-up. As for the retired old-timers who'd like to bring back the days when they were young and worked on the rails, I agree with them that the sound of a deep-throated steam whistle stirs the blood in a way that the *moo* of a diesel horn could never stir it." •

PRR IS ASKING the ICC for permission to abandon its 15-mile Kinzua branch in Pennsylvania, which suspended service in 1952 for lack of business, laments Luther Cummings, Jr., Lancaster, Pa. •

SIX MONTHS of doing nothing almost drove Bert C. Kilifer crazy. Bert is a retired section foreman living at 5272 Pine Ave., Long Beach, Calif., with 47 years' service on the Southern Pacific and Union Pacific. He's had an active life—and still has, in a way, even though he is drawing a pension.

The king snipe said good-bye to trackwork very reluctantly in 1945. Then he sat around, bored with idleness, for as long as he could stand it. At length, being handy with tools, he built a bird house.

"The birds liked it so much that I built another, and another, and a great many others," he said proudly to a young neighbor, Ethel G. Causey, 5301 E. Carson, who now tells us about it. "I have a whole colony of bird houses," he went on, "all painted in bright colors."

These dwellings have various shapes. A long string of them resembles freight cars and a diamond-stacked engine, stopping at a station. Each one, including the two-story depot, is occupied by birds. You might call the scene a model railroad layout, scaled an inch to the foot, with semaphores, an oldtime pump-handle section car on a siding, and so on, but the train never moves. Only signs of life are fluttering sparrows, robins, starlings, mocking birds, and other feathered tenants, sometimes as many as 500 in a season. Children nearby have fun visiting Birdtown.

(Continued on page 72)

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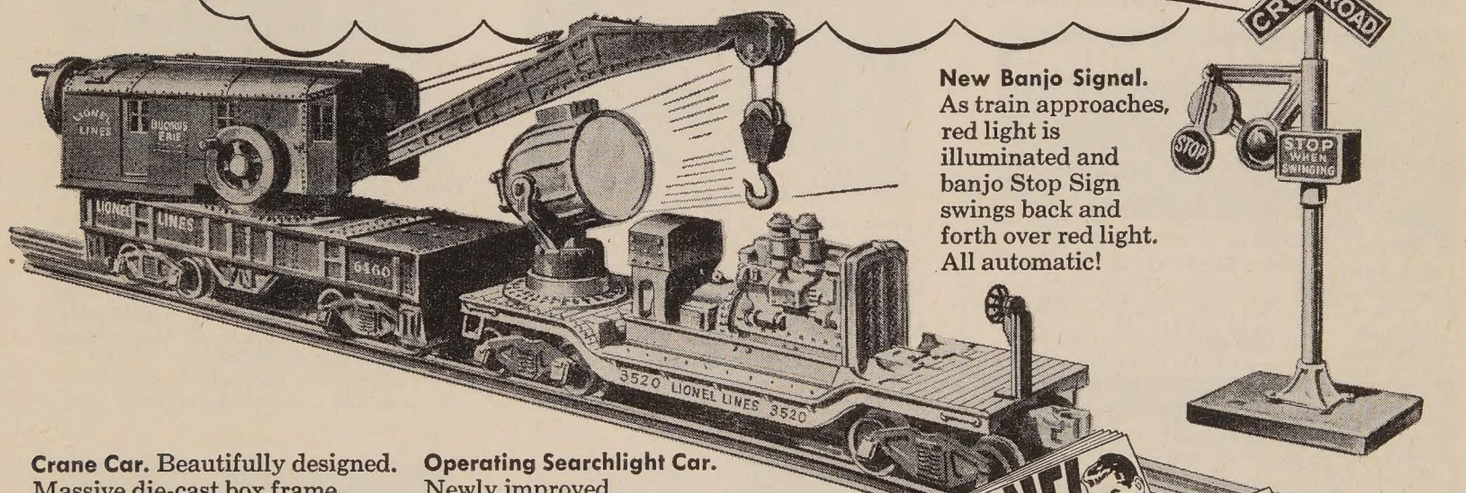
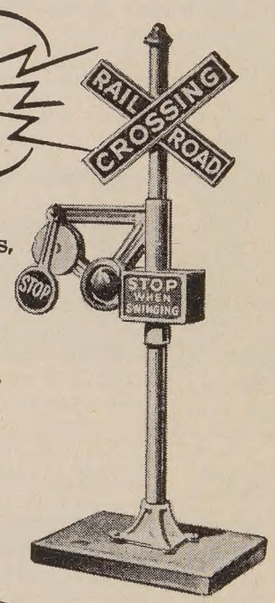


New Banjo Signal. As train approaches, red light is illuminated and banjo Stop Sign swings back and forth over red light. All automatic!



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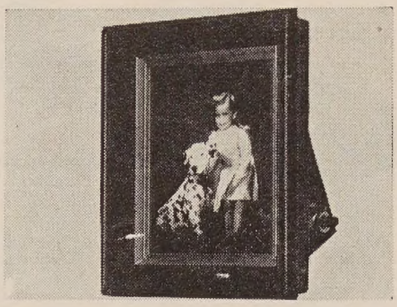
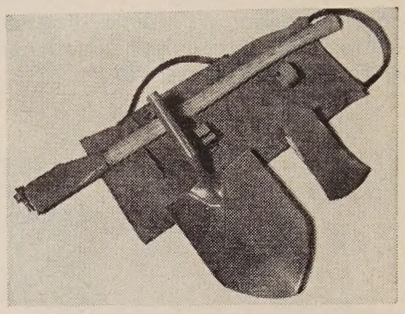
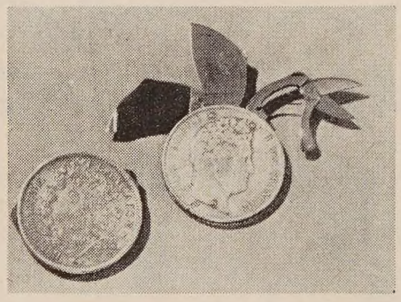


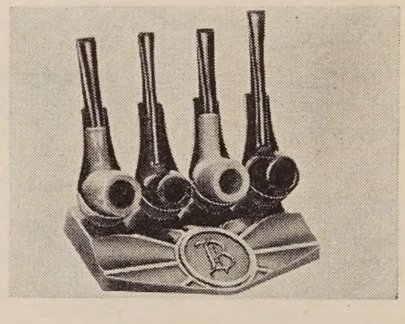
GOT A COLOR PHOTO of your favorite gal or hound you'd like to have enlarged? For $5.95 ppd., Pavelle, Inc., Dept. AD, 533 W. 57 St., N.Y.C., will take a 35 mm. to 4″ x 5″ transparency, duplicate it on 4″ x 5″ film, return it to you in a wooden frame (note blond, mahogany finish) with built-in light.



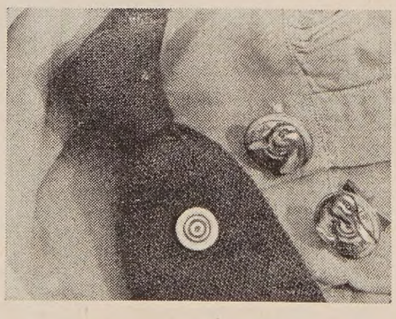
FOR OUTDOORSMEN—a practical utility camp kit that includes an axe and shovel with an interchangeable handle. Lightweight (6½ lbs.), it comes in a canvas carrying case that doubles as a water bag. $13.95 ppd. Dillon Enterprises, Dept. AD, 3033 South 3380 East, Salt Lake City, Utah.



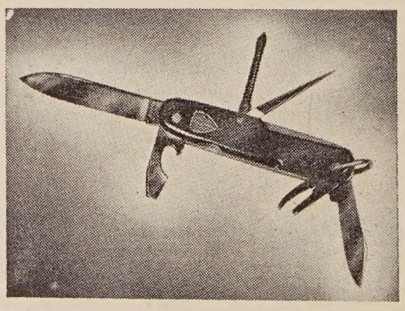
COIN THAT'S holding this unusual knife is a five-franc piece the French were bandying about some 100 years ago. It's about the size of a silver dollar, has stainless-steel knife, file and scissors that fold in. Comes for $15 ppd. from Corrado, Inc., Dept. AD, 26 North Clark St., Chicago, Ill.



IF POP SMOKES a pipe, gladden the poor guy's Christmas with this heavy metal pipe holder that's finished in bronze. Comes with his initial (specify) in old English lettering. Base has felted bottom. A good buy, it comes for $7.50 postpaid from L. E. Mason Co., Dept. AD, Boston 36, Mass.



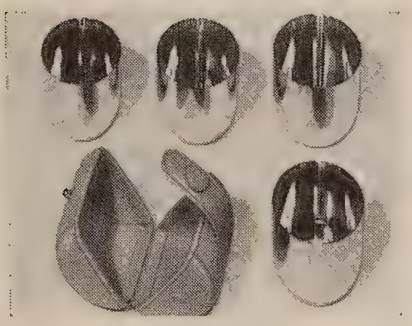
IF YOU like French cuffs, here's a set of cuff links made from actual caps of 12 gauge shotgun shells with nicely cast duck heads mounted on them. Heads include quail, pheasant, mallard, canvasback. Specify. $4 ppd.; $1.50 for .410 tie tack; $5 for set. Gately, Dept. AD, 335 E. 31, N.Y.C.



NOTHING NEW about this Swiss Army knife, but it's as handy a pocket one as you'll find. Swiss import has two stainless steel blades, screwdriver with cap lifter, can opener, reamer, Phillips screw driver. Red handle's unbreakable. $8.50 ppd. Baron Enterprises, Dept. AD, 224 Sullivan, N.Y.C.

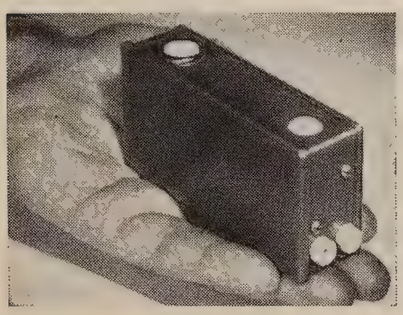
SHOP BY MAIL

All products shown here may be obtained directly from indicated sources. Send check or money order with your order. Manufacturer will refund full purchase price on prompt return of unused, non-personalized items. This department is not composed of paid advertising.

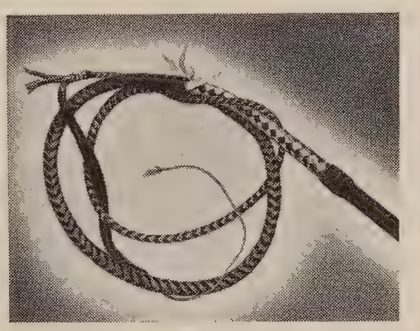


FOR THE CHARACTERS who aren't satisfied to take their hooch straight from the source, here's a set of 4 small metal drinking cups that'll hold about a shot each. Chrome-finished, cups nest, fit in 1½" high tan leather case. $4.50 ppd. Cee & Ray, Dept. AD, 1430 55th St., Brooklyn, N.Y.

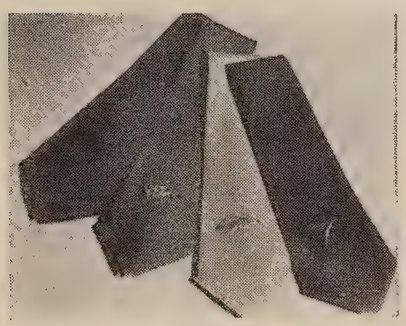
BEASTIE YOU'RE looking at happens to be a Mexican burro—a nice pet for any kid, we think. Intelligent, easy to train, burro eats almost anything. Three-months-old male burro stands 38". Expressed collect from Texas for $85. Live delivery guaranteed. Spencer Gifts, Dept. AD, Atlantic City, N.J.



NEW GEIGER COUNTER is not much larger than a pack of cigarettes, but don't let the size fool you. It's a precision instrument that's accurate and sensitive. Works with ear phones; weighs 11 oz. with crystal ear phones, $35 ppd. Micro Specialties Co., Dept. AD, 1834 University Ave., Berkeley, Cal.



THESE HAVEN'T been around for a long time—real old-time Western bullwhips complete with weighted swivel handle. You can twirl it easily, and it makes a terrific crack. Made of top grade 6-plaited leather. $7.95 ppd. for 6-ft. whip; 8-ft., $9.95 ppd. Bay Co., Dept. AD, 1619 First Ave., N.Y.C.



NOTHING UNUSUAL about these ties themselves—they're like any others that are handwoven of 100% virgin wool—but the decorations at the bottom are different. They're actual flies, real salmon streamers used in fishing. $2.98 postpaid from Gaylords, Dept. AD, 1 Chase Hill, North Adams, Mass.

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Thrill her with these sheer nylon French-style briefs. She'll love...you'll love the peek-a-boo black nylon lace . . . the saucy satin bows . . . and that so-personal touch — your name or her name beautifully monogrammed on each pair. Order a set: one with girl's name... one with boy's name. Colors: Bewitching black or bridal white.

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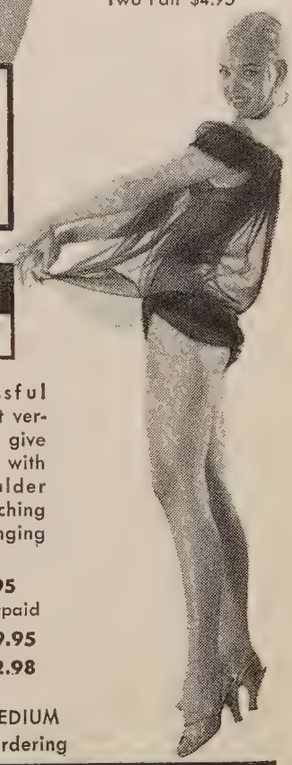

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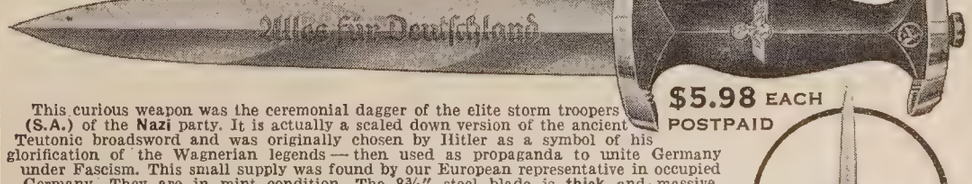

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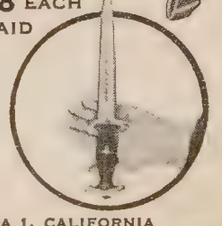

This curious weapon was the ceremonial dagger of the elite storm troopers (**S.A.**) of the **Nazi** party. It is actually a scaled down version of the ancient Teutonic broadsword and was originally chosen by Hitler as a symbol of his glorification of the Wagnerian legends — then used as propaganda to unite Germany under Fascism. This small supply was found by our European representative in occupied Germany. They are in mint condition. The 8¾" steel blade is **thick** and massive. Overall length 13¾". The round escutcheon on upper handle is the "blood and steel" colored symbol of the storm trooper — the initials **S.A.** in form of lightning bolts. Below is the eagle and **swastika** of the German army of that era. An excellent hunting knife, a remarkable find for the collector. Send check, cash or money order. Add 80c per knife for U. S., APO or FPO air mail. Sorry, no C.O.D. California residents add 3% state tax. Dealers inquire.

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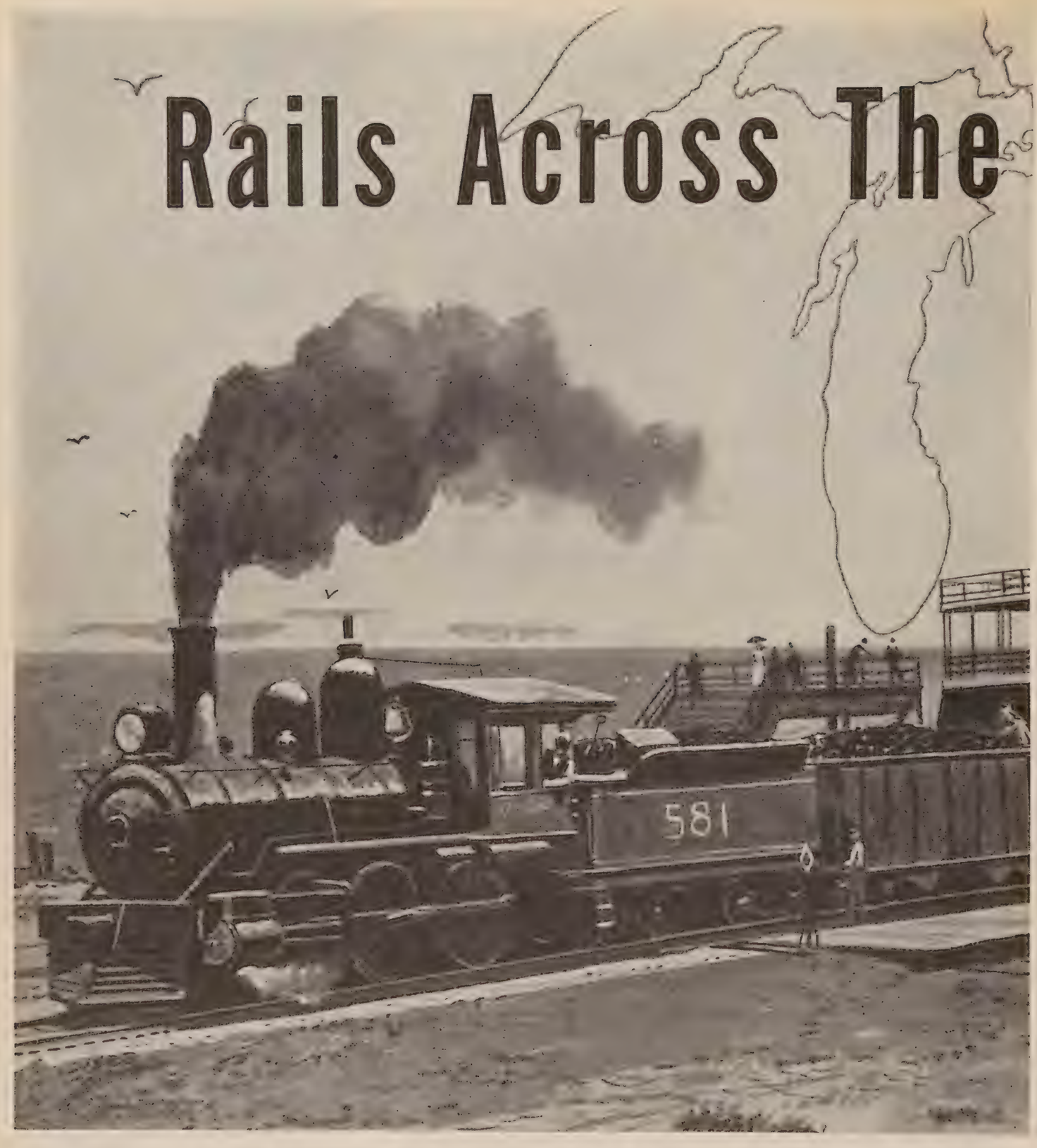


Trainferries Can Boast a Great Record in Battling Gales and Delivering Freight Cars—but More Than One of Them Sailed Away and Never Came Back

by FREEMAN H. HUBBARD

"CAR FERRYING can be monotonous," said the veteran Captain Bernard Rota of the *City of Saginaw 31,* in the Chesapeake & Ohio Railway fleet, "but it can also be very exciting."

The *City of Saginaw 31,* launched in 1929, was the world's first turbine-electric-driven trainferry. Daily she crosses the sixty miles of deep fresh water of Lake Michigan between

Great Lakes

Illustration by Herb Mott from Grand Trunk Railway photo

Manitowoc, Wis., and Ludington, Mich., with a cargo of freight cars, automobiles, and landlubbers.

Sometimes she rides a sea of glass, baked a hot yellow; sometimes she dances on ink ruffled with whitecaps, and there are days and nights when the boat knifes her way through mountain-high waves in a howling gale. Whatever comes, the crew is prepared to meet it; for each man of them is a mariner as well as a railroader.

In fair weather, the fickle lake sparkles like acres of diamonds, and after the sun goes down it mirrors shimmering streaks of moonlight. At such times, when his whole world is at peace, the skipper would have you believe the work of ferrying cars is monotonous.

But is it, really? Would you say that the master of a ship is bored as he stands on the bridge at night, gazing afar at the shining pathway of stars, watching for harbor lights and signs of a change in the weather, dreaming perhaps of days that were and days that might have been?

Always in the back of his mind, as he listens to the crooning song of waves caressing his ship, are the dreaded weather shores, the shal-

The Lake Michigan Carferry Service, by Albert G. Ballert

RAIL AND FERRY routes of railroads operating ferries across Lake Michigan, bypassing the congested Chicago area, are shown here.

low water, and the sudden squalls that spring up without warning. Yes, and the wraiths of wooden vessels that vanished long ago with all hands aboard, swallowed up mysteriously by the Great Lakes and never seen again. These wraiths, like *Flying Dutchmen,* are said to haunt the trade routes of Michigan, Superior, Erie, and the rest.

Records compiled by the U. S. Commissioner of Navigation show that in one decade, beginning 1878, a total of 5999 vessels were wrecked on the Great Lakes, *1093 of which were totally lost!* Many fathoms deep their hulks lie in cold watery darkness, waiting for the legendary Judgment Day when the sea shall give up its dead.

For example, in Lake Erie, off the mouth of the Detroit River, there rest the sunken bones of the steamer *Clarion,* and in her rotting hold is a cargo of rusted new locomotives that will never wheel a string of varnish or a manifest freight. If Davey Jones is anything like Casey Jones, he must have had fun playing around those moss-crusted engines.

NOT within the memory of old-timers have the Great Lakes frozen over completely—except for Lake Michigan in 1917—but when the mercury dips very low and stays there for an endlessly long week or two, the shores are rimmed with strips of hard glistening ice several miles wide. It is then that the *City of Saginaw 31,* like the ferries of all other railroads that thread the lakes with steel, doggedly crunches ice as she moves forward under full steam.

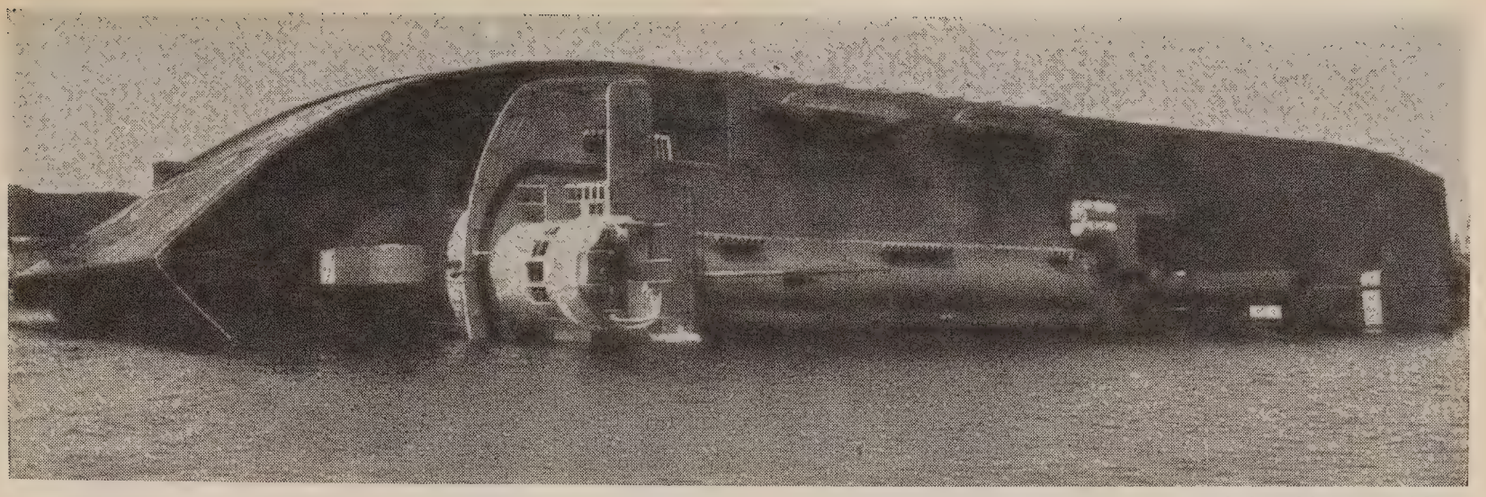
More troublesome than solid ice—at least, in recent years—is slush ice that clogs the ships' propellors as sawdust used to do in the bygone days when a great logging industry centered around Lake Michigan. During sustained heavy snowfalls and with a fierce wind blowing directly into the harbors, a dense slush often interferes with navigation to such an extent that two or three trainferries, placed end to end and working their screws at top speed, can move ahead only a few hundred feet in several hours! Sometimes, however, a sudden veering of the wind drives the mass of slush out to sea, restoring the harbors to normal operation in a matter of minutes.

There are days when some of the crew men wish they had gone into land railroading instead of signing up on a bloomin' carferry. But after they have fought and won a violent battle with a lake storm or smashed an ice barrier or put out a fire at sea, do they pack their duffle bags and chuck their jobs the moment they hit dock?

Not at all! They visit some joint like old "Kewaunee Bill's place" at the Hotel Karston and celebrate. Arthur C. Frederickson, himself a ship's officer on Lake Michigan, and his wife, Lucy, have written a little book, *Early History of the Ann Arbor Carferries,* which says:

"From Sailor Kate's in South Chicago to Sloppy Joe's in Buffalo, from the Golden Pheasant in the Portage to Hayden's Bar in Manistique, there was no place on all the lakes where a seafaring man was more welcome than at Kewaunee Bill's. Bill had sailed before the mast himself, having given up the sea some years ago when he came ashore at Leland Pier in a big sea, off a sinking schooner with her decks awash under him."

Until rather recently, when trainferries burned coal, the firemen had to stoke laboriously by hand, besides dumping ashes, raking out the clinkers, banking fires, and cleaning boilers; and in those days the turnover of firemen was large. Then the boats converted to oil-burners. The Canadian National's Grand Trunk, for example, made the change on



TIPPED OVER at slip in Manistique, Mich., on night of May 29, 1909, *Ann Arbor 4* was flooded so quickly that the embarrassed ship's maid found herself scrambling over the slanted deck in her nightgown. The boat was righted four weeks later and restored to service.

its three carferries in 1947. Boiler rooms, no longer grimy from coal dust, gleam today with hospital whiteness.

The right proportion of fuel oils gives good combustion. Disturb this, and the huge brightly-painted funnels emit black smoke, while telltale lights in the boiler room glow like a bobby-soxer's lipstick. Correct the trouble, and the smoke disappears, the lights switch to blue.

This change-over to oil power is comparable to the adoption of diesel locomotives on land. The men in a modern firehold feel more like human beings. They never did think it was very romantic to shovel dusty coal in a superheated room until their arms ached, their naked bellies tightened into knots, and they were temporarily blinded by sweat and the leer of a white-hot firebox. Now, with improved working conditions, marine firemen stick to their jobs.

BACK in 1836, when rails were new, some daring soul ferried railroad cars across a body of water for the first time in history. Scene: the mouth of the Susquehanna River in Maryland. It must have been quite a show for the neighboring yokels, but few cars were carried and the operation did not last long.

Eleven years later, the world's first major carferry service was begun on the Firth of Forth, Scotland, each ferry having a capacity of 34 four-wheel freight cars. Getting back to America, boxcars were ferried across New York harbor as early as 1875, and five years afterward the Southern Pacific started a carferry service across San Francisco Bay.

Meanwhile, in 1866, the *Great Western* became the first carferry to serve the Great Lakes area and the first to cross an international border. Built at Glasgow, Scotland, she was shipped to the New World in sections, then re-assembled and put to work between Detroit, Mich., and Windsor, Canada. A new era had begun.

The first trainferry seen on Lake Michigan was the *St. Ignace,* which the Mackinac Transportation Company placed in service in 1888 on the Straits of Mackinac, where Lake Michigan joins Lake Huron. Her route linked the Michigan Central Railroad (now New York Central) terminal at Mackinac City, Mich., with that of the Duluth, South Shore & Atlantic Railroad at St. Ignace, Mich., but her capacity was only six passenger cars or ten freight cars.

In 1890 a second ferry was added to that line, the *Ste. Marie,* which could transport 18 freight cars at a time. Both vessels were wooden. They have since been replaced by the larger *Chief Wawatam* and a new steel version of the *Ste. Marie.* Unlike ferries that navigate the open lake, these two load from the

A. C. and L. F. Frederickson

SNOW AND ICE were serious problems to wooden ferries like *Pere Marquette 3.*

OLDTIMER, *Flint & Pere Marquette 4* bore only a slight resemblance to sleek modern trainferries.

Above photos from Chesapeake & Ohio

ONLY ONE funnel graced superstructure of *City of Midland 41.*

A. C. and L. F. Frederickson

DRIFTING HELPLESSLY on stormy night of February 13, 1923, *Ann Arbor 4* narrowly escaped being smashed to bits between narrow piers of home port, Frankfort, then sank in shallow water. Later she was raised and sailed again.

bow, or front, rather than the stern. Bow-loading is much easier than stern-loading when a slip is ice-filled, but a bow-loading vessel would be at a serious handicap in dealing with the heavy seas on an open lake.

Also in 1890, a "longitudinal" car-ferry route was inaugurated in Green Bay of Lake Michigan between Chicago and Peshtigo, Wis., consisting of a tug that towed two bargeloads of railroad freight cars on each trip for the Chicago & North Western. A few years later, one of the barges sank in a squall, with its cargo, and the C&NW discontinued the service.

But before you forget about the second *Ste. Marie,* consider what happened in 1926. A blizzard swept the two big Canadian grain-shipping ports of Fort William and Port Arthur on November 30th of that year, delaying the final dash of the grain fleet with an enormous cargo before the then current insurance rates were due to expire at the end of November. At four that afternoon the snow died down. There was tense excitement. Only eight hours remained in which to load the grain ships.

During those eight busy hours, 22 freighters took on five and a half million bushels of wheat—enough to make quite a few loaves of bread. Then, just before deadline, they set out across the bleak icy waters of Lake Superior and passed through the Soo Canal at 20 below zero. There, an enormous ice-locked fleet of freighters blocked their further passage. The salty remarks those 22 skippers made on this occasion would probably be lively reading matter if they had been recorded.

News of the ice blockade of Canada's wheat crop nearly threw the Chicago Grain Market into a panic. Something had to be done—and quickly! While the mercury was sinking to 35 below, with a total of 127 cargo-laden vessels stuck in the ice, the carferry *Ste. Marie* was rushed up from Lake Michigan under full steam to smash open a channel.

In those days the *Ste. Marie* was the mightiest icebreaker on the lakes. When she arrived, sailors from the 127 marooned boats were walking around on the ice, swapping yarns, building huge bonfires, and buying food and tobacco from local farmers who had driven bobsleds and sleighs loaded with provisions onto the frozen lake.

A biting wind blew vast gusts of smoke from the idle fleet across the ice, across the snow-covered land. Miles of smoking funnels. At night, acres of twinkling lights under the cold star-sprinkled sky. It looked as though a big industrial town had sprung up out of nowhere.

After bucking the ice for ten days, the *Ste. Marie* broke through. You should have seen and heard those 127 freight-carrying ships head for open water, whistles screaming!

LAKE ONTARIO also has had its share of excitement. A trip that began on Sunday, January 6, 1924, will be talked about as long as carferries ride the Great Lakes. Captain C. E. Redfern of the *Ontario 1* steamed out from the Genesee, N. Y., dock of the Buffalo, Rochester & Pittsburgh Railway (now B&O) with 60 loaded coal cars.

"Wind was blowing strong," he related, afterward, "but the water was comparatively quiet till we left the lee of the American shore and headed out into the lake, bound for Coburg, Ont., Canada. Then we realized we were in for a rough trip. Waves of solid water 20 feet high broke over our bow and for several hours our headway was no better than a mile and a half an hour.

"Darkness came on. We knew we couldn't make Coburg, due to the heavy seas, so we wirelessed that we would head up the lake toward Toronto and we asked Captain Nicholson, manager of the carferries, to order all lighthouses to be lit.

"Subsequently, in response to the urgent request for land lights to guide our course, the mayor of Port Hope, Ont., not only had the lighthouse keeper there put out warnings but induced the Port Hope Sanitary Company to get up steam and blow their whistles.

Chesapeake & Ohio Railway

CAPTAIN Harold Altschwager and wheelsman Kenneth E. Phillips of the C&O *Spartan*, one of the newest carferries on the lakes.

Chesapeake & Ohio Railway

DECK HAND locks car wheel with heavy rail clamps aboard the *Spartan* to keep load from shifting during voyage. Screw jacks are placed at corners of each car and in rough weather short chains hold cars to the deck.

"At Bowmansville and Newcastle the seas were too heavy for anyone to reach the lighthouse, but the Canadian National Railways agent at Port Union had the section men keep red flares burning along the shore. These flares saved us from being wrecked!

"By the time we were abreast of Bowmansville we were running by dead reckoning. Our patent log had frozen and showed only a mile an hour, but I am sure we were making about five.

"It was now pitch dark. Three of us on the bridge had our hands full. My son Lorenzo stood beside me and watched the smoke from our funnels, keeping me posted on wind direction, while I stood by the helmsman, and thus the three of us fought it out. Below decks, the crew took turns firing. Even the stewards,

cooks and waiters worked in the stoke hole.

"I told Lorenzo: 'We should see those railway flares pretty soon. Keep an eye out for a red light!' Pretty soon he sighted a red light and then a locomotive headlight. That gave us an inkling of where we were, and we fought on with renewed confidence.

"About two o'clock Monday morning we were abreast of Toronto, still driven before the wind. Harbormaster Allen and the life-saving crews tried to help us. The Eastern Gap lights had been dismantled for the winter, but the harbormaster succeeded in getting the old Gibraltar light on the island lit. This helped to locate our position more exactly.

"Owing to a shift in the wind, we couldn't take refuge back of the island, so we cruised to Port Credit until daylight. Then we ran in and anchored, wirelessing Captain Nicholson, 'All tired but happy.'"

The promenade deck was covered with three feet of hard ice. In some places you had to crawl on your hands and knees under the icicles. On the car deck, water about a foot deep was constantly rushing back and forth. Floating in and out with it were pillows, blankets and mattresses washed from the crew's quarters in the bow.

It was not until early Tuesday afternoon that the gallant Captain Redfern finally docked his ship at Coburg.

While he was docking, the factory whistles shrieked their congratulations, the City Hall bell pealed, and church bells rang out thanksgiving from their steeples. The chimes of St. Peter's played the Doxology: *Praise God from Whom All Blessings Flow!*

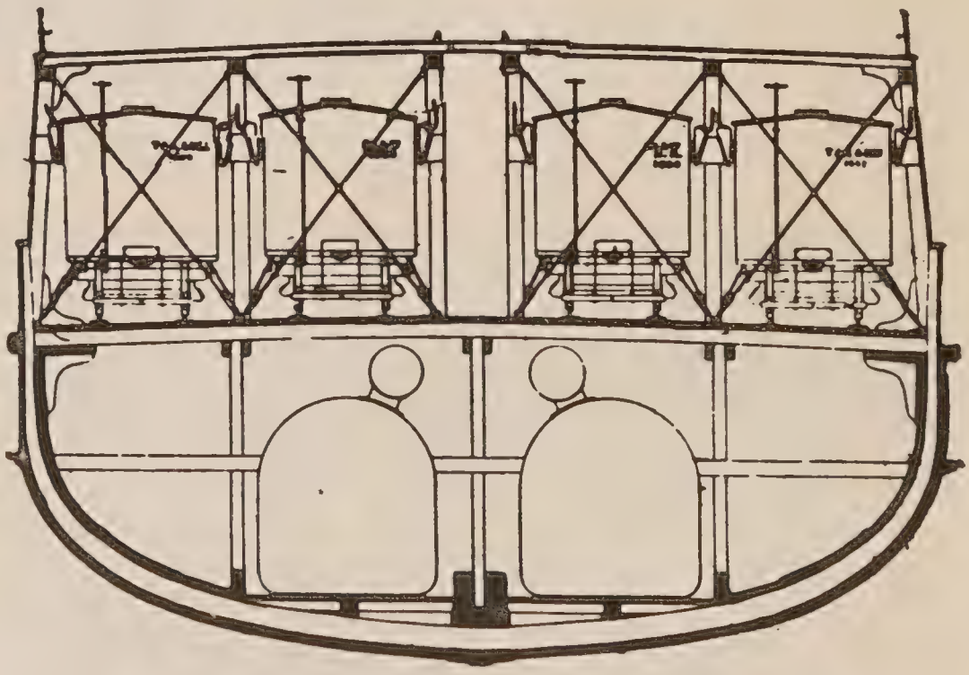
CREDIT for the first carferry service across Lake Michigan goes to James M. Ashley, builder and president of what is now the Ann Arbor Railroad, a Wabash subsidiary. Mr. Ashley was a bold pioneer. He'd been a Congressman, a close friend of Abe Lincoln, and Montana's territorial governor. His interest in railroading came from contacts with President Scott of the Pennsylvania, a member of Lincoln's cabinet.

Ashley realized that his road, terminating at Frankfort, would be bottled up in the glove-shaped Michigan peninsula unless he could conquer the water barrier. But it took all the influence he could bring to bear on skeptical financiers to get a carferry built.

Even after he launched the *Ann Arbor 1,* shippers were extremely reluctant to risk sending cars loaded with their merchandise across the 60 miles of storm-tossed lake. So the new boat waited, empty, at her dock. Mr. Ashley was worried. At last, he put pressure on a Pennsylvania coal producer that sold fuel to his railroad, arguing and threatening, and induced the company to route three carloads through Frankfort and across the lake to Kewaunee, Wis. The maiden voyage was made November 27, 1892.

Said a local newspaper, *The Kewaunee Enterprise:* "Saturday afternoon, after straining of eyesight and many slighting remarks by the incredulous, smoke was discerned in the direction of Frankfort, and within an hour the monster leviathan carferry *Ann Arbor No. 1,* without a flag flying or whistle blowing, steamed majestically into port."

Ever since that day, the Ann Arbor has been in the carferry business. This road, oddly enough, has a water-route mileage, 312, that exceeds its 308 miles of land operation. No other road can make such a claim. Connecting directly with thirteen railroads, the AA coordi-



PIONEER carferry, the *Ann Arbor 1*. Cross-section (above) and side view with upper deck removed show how freight cars were placed on main deck. She carried no flag on her maiden voyage.

FIRST CARFERRY to cross Lake Michigan, *Ann Arbor 1* burned mysteriously to the water's edge at Manitowoc dock in 1910 after 18 adventurous years on America's great inland sea.

nates its boat schedules with timetables of the thirteen roads to provide continuous service. It is important to note that about two-thirds of all freight handled by the Ann Arbor is shipped on carferries. Without its fleet of four seaworthy vessels, the AA would wither.

The *Ann Arbor 1* had an adventurous career. One wintry day in 1895 she left Kewaunee at three A.M., bound for Frankfort. She fetched up southerly at Frankfort and while trying to get up to the windward she wallowed around so badly that she broke most of the gear fastenings that held the freight cars to her deck. Four of them contained flour and three Wisconsin butter. Much of this lost cargo drifted in upon the beach north of town and found its way into several homes thereabouts.

It was this boat that held the all-time record for ferries stuck in the ice. On February 2, 1899, skippered by Frank Butler on a run to Menominee, she left Frankfort and found so much ice in Green Bay that sixty-three days and nights passed before she could move!

According to *Early History of the Ann Arbor Carferries,* the railroad hired the steamer *Algoma* to break her out, but both ships smashed buckets off their wheels and laid there in the frozen waste side by side till spring came. Men driving out onto the ice in sleighs kept the crews supplied with food and fuel.

In 1902, the same book notes, the *Ann Arbor 1* sighted a burning steamer, the *John Emory Owen,* loaded with corn, about 15 miles out of Sturgeon Bay Ship Canal. Other craft had taken off the crew. The AA ferrymen extinguished the fire and, with much difficulty and ingenuity, towed the abandoned ship into port. For this time and effort, but only after many weary months of lawsuits, each crew man on the *Ann Arbor 1* was paid a measly $25 in salvage money by the underwriters.

But if you think $25 is a small sum for so much trouble, listen to this: One day the crew of *Ann Arbor 1* picked up a brand new ship, the *Batavia,* owned by the Lehigh Valley Railroad but adrift and deserted. They boarded the *Batavia* and towed her first to Manistique and then to Frankfort. For this salvage job, each crew man was rewarded with the munificent sum of one dollar, except that the captain received six dollars and the engineers five bucks apiece. No Ann Arbor sailor ever got rich from salvaging abandoned ships.

On a balmy spring day the *Ann Arbor 1* steamed out of Northport, Mich., bound for Manistique. Besides her regular cargo of freight cars, she had taken on board twenty horses, with hay and feed, to be delivered to a lumber camp on North Fox Isle.

The water was too shallow for the boat to pull up at the island dock, so a scow was rigged up with a slanted plank to get the horses ashore. Nineteen made it safely, but a beautiful black stallion leaped into the lake, swam completely around the carferry twice, despite frantic efforts to save him, and finally headed out to sea and was drowned.

Thus for nearly eighteen years the famous *Ann Arbor 1* ferried railroad cars, battled gales, was icebound and waterlogged, picked up abandoned ships, and more than once "limped into port," as newspaper writers say, with her steering gear crippled.

Her end came March 8, 1910. After being stuck for a week in a heavy ice floe, the Fredericksons tell us, she tied up at the Manitowoc dock. On board were a score of freight cars loaded with lumber, charcoal and other shipments, and two crew men as watchmen.

Late that afternoon, fire mysteriously broke out on the boat and burned all night and until noon the next day, when it reached the water's edge. This old pioneer carferry de-

Chesapeake & Ohio Railway

FLAGSHIPS of the Chesapeake & Ohio trainferry fleet, the mighty *Badger* (left) and *Spartan* (right), were both launched in 1952. Each was built to carry 32 freight cars or 160 autos, plus hundreds of passengers.

served a better fate. The two watchmen were asleep when she caught fire. They awoke too late to fight the flames or even to scamper aft and get off the stern. They had to jump over the bow and swim ashore.

EACH YEAR, Ann Arbor carferries make more than 4000 trips across Lake Michigan, often bisecting the routes of bulk freighters, when good seamanship is needed to avoid collisions in foggy weather. Yet in sixty-two years of continuous operation, despite all the hazards involved, the AA has had an almost perfect safety record. Each of the other two trainferry services on the same lake lost a ship in a storm, with a large casualty list.

The first carferry disaster involving loss of life on the Great Lakes occurred on Lake Erie on December 7, 1909, when the *Marquette & Bessemer,* a steel boat owned by the Bessemer Transportation Company, foundered on her regular run between Conneaut, Ohio, and Port Stanley, Canada. Her entire crew of thirty men went down with her. The wreck was—and still is—a mystery.

Two days later, bits of wreckage from her were sighted by the steamer *William B. Davock* off Long Point. Presumably her cargo of freight cars tore loose in the gale. By a grim coincidence, the *William B. Davock* likewise sank with her crew, but on Lake Michigan, in the Armistice Day storm of 1940.

On that same Armistice Day the trainferry *City of Flint* (C&O) was caught off Ludington harbor in a gale of 75 miles per hour, missed the breakwater, and ran aground. By means of an 800-foot breeches buoy, the few passengers were safely taken ashore. The crew stayed aboard. Later, with the aid of a tug, they refloated her.

TODAY, the fifteen trainferries that make regular trips across Lake Michigan are operated by three different railroad setups: the C&O, seven boats; the Wabash-Ann Arbor, five boats, and the Canadian National-Grand Trunk, three. These vessels cover eight routes out of eight ports, with a total steaming direction of 610 miles.

The eight ports are Kewaunee, Manitowoc, and Milwaukee, all in Wisconsin, and Menominee, Frankfort, Ludington, Muskegon, and Manistique, all in Michigan.

Frankfort is a terminal for four routes. Each of the other ports is a terminal for from one to three routes. The longest cross-lake ferry route on Lake Michigan, 97 miles, Ludington-Milwaukee, ranks above all others in both east- and westbound tonnage. The shortest crossing is Ludington-Manitowoc, 60 miles. The carferry movement of

loaded freight cars is heavier westbound, that of empties is heavier eastbound.

All of Lake Michigan's trainferry routes were developed by Michigan railroads. The Wisconsin roads had such broad Western territory to draw from that they felt no need to organize ferry routes, although they did profit from such routes.

Lake Michigan is more than 300 miles long and from 50 to 80 miles wide, extending into the densest section of rail network in the Midwest. Therefore, ferries are employed to overcome this barrier to land transportation. The amount of switching done in and around the Windy City not only delays through traffic for many hours but tends to damage the merchandise.

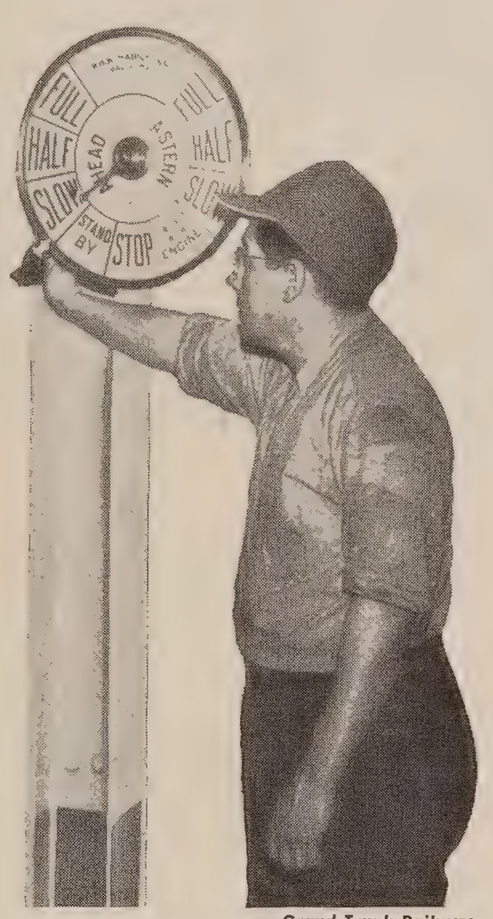
Before ferries were used, freight destined for cross-lake shipment had to be transferred by hand labor on both sides of the lake. This method, known as "breaking bulk," was slow and costly.

Look at a Michigan road map and you'll see part of the reason for the carferries' heavy passenger movement. U. S. Highway 10, for example, is a travel-jammed artery most of the year. Cutting across the state, it ends at Ludington. Other vital highways descend from the north or climb up to Ludington, funneling an army of motor vehicles and passengers into the ferry docks. At all other Lake Michigan ports you will find a similar situation.

Each ferry accommodates passengers in addition to four lines of track on the main deck which can hold from 24 to 32 railroad freight cars, depending upon which boat is used. All Lake Michigan carferries except the Grand Trunk's also carry automobiles. Each of the fifteen craft has a bow design which permits the ship to ride up on thick ice and crack it with her ponderous weight. She also has twin screw propellors, each propellor subject to independent control if necessary.

The modern navigation instruments used on all Great Lakes carferries include the gyro-compass, the radio direction finder, radar, and ship-to-shore telephone communication.

Ferry yards work fast. They must, because ship time is precious, and schedules must be met. Once inside a vessel, the railroad cars are held firmly in place by specially designed gear. Heavy rail clamps are wedged behind the wheels to hold the cars aboard the ship. Screw jacks are placed at all four corners of each car, between the car and a dead rail that is attached to the car deck, to prevent the cars from rocking while at sea. In rough weather short



Grand Trunk Railway

IF THIS Grand Trunk carferry crew man will send us a card or letter identifying himself, we will give him a year's subscription to *Railroad Magazine* free.

chains, tightened by turnbuckles, also are fastened to each corner of the car and to the car deck.

ALTHOUGH the Flint & Pere Marquette (now C&O) had reached Ludington on Lake Michigan's eastern shore in 1874, long before the Ann Arbor was completed to Frankfort, the Flint road did not begin competing for carferry traffic until 1897. But when they did start, they started right. Their first boat, the *Pere Marquette,* later numbered 15, was the world's first steel carferry. She set the pattern for many of her kind that were built later in other parts of the world.

By merging in 1901 with the Chicago & Western Michigan Railroad, the F&PM became the Pere Marquette and acquired a wooden carferry, the *Muskegon,* which had originally operated on Lake Erie as the *Shenango.* She was rechristened the *Pere Marquette 16.*

The C&O now has a fleet of seven trainferries, each with an operating speed of 18 miles per hour. Latest two, the *Badger* and the *Spartan,* launched in 1952, can each carry 32 freight cars or 150 automobiles, plus hundreds of passengers.

Pride of this fleet some years ago was a cat named "Skipper," hard-bitten by storms and blazing sun but always ready to face a good nor'easter. Skipper arrived at Ludington aboard a tug and joined the C&O fleet. He regularly made inspection trips to ports across Lake Michigan, always returning on the same boat. He would ride to Manitowoc, disembark, transact whatever business a carferry cat has abroad, and then, hearing the hoarse whistle call, would reach the boat in time to pussyfoot up the gangplank. Rumor has it that Skipper was courting a female cat at Manitowoc. In between voyages, the C&O mascot kept busy as a mouser, patrolling the dock warehouse, shops and store-room.

Yes, carferrying has its light side. Maybe you've heard the one about a sudden cold spell hitting a C&O boat. The captain called down to crew quarters, "Is there a mackintosh aboard that is big enough to keep two young ladies warm?"

"No, sir," boomed the answer, "but there's a McPherson who's willin' to try."

Some time ago the C&O's Ludington office was thrown into consternation when the Milwaukee office radioed, "Dead man pulled out at Milwaukee." Ticket-office girls promptly reported that a passenger had died in Milwaukee. An investigation by Dan Rathsack, general agent, revealed that the message was correct but that the term *dead man,*

SEVERE WINTERS clutter up Lake Michigan harbors, yet all-steel trainferries keep channels open, day and night all year 'round. Time was when ferries frequently got stuck in ice, one for as long as 63 days!

in marine railroad lingo, means a heavy chain anchored in the ground at dockside to which the carferries attach their mooring lines. One such chain at Milwaukee had been pulled from its concrete footing by a boat.

Then there's the story of the rich man missing from a yacht after a rather wild party on Lake Michigan and presumed to have been drowned. A poster showing his portrait and offering a substantial reward was posted in *Ann Arbor 2*. This notice caught the eye of "Kewaunee Jim" Smith, second mate. While on watch shortly afterward, Jim spotted a floating corpse. Lowering a lifeboat, he soon had the body in tow. Later, on deck, he compared the poster with the stiff he had fished up. The mate was disgusted.

"We've got the wrong man!"

He was about to throw his catch overboard when the skipper intervened, insisting that the body be taken to port and turned over to the police.

SOMETIMES a trainferry makes an amazing rescue. Take the case of Mr. and Mrs. Charles Rennie, who boarded an airplane on the morning of June 22, 1933, to fly from Traverse City, Mich., to Milwaukee, accompanied by a pilot and a mechanic. The plane ran into a heavy fog and plummeted into the chilling waters of Lake Michigan. All four people swam to the fuel tank, the only piece of wreckage in sight.

Mrs. Rennie sat astride the tank, while the three men clung to it. There they stayed all night. Around daybreak the pilot, numbed with cold, loosed his hold and sank. Pretty soon the despairing mechanic followed him to Davey Jones's locker.

The last man to stay alive, Mr. Rennie, was planning to trade places with his wife temporarily so he could warm himself in the sun, but the great ball of fire rose so slowly that he could not wait. Handing his wife his wallet and watch, he gasped:

"Good-bye, darling! Take good care of the children!"

Then he, too, sank into a watery grave. Desperately unhappy, Mrs. Rennie managed to remain on the fuel tank, holding a finger over an air vent to keep it afloat. A blistering sun followed the cold night. Several times that day coal boats passed the woman at a distance.

Not until the second evening did she attract attention by ripping off her petticoat and waving it frantically. Captain Al Larson, sailing *Ann Arbor 7,* spied the wreckage and the lone survivor, reversed his engines to stop the vessel, and blasted a whistle signal, "Man the lifeboat!" They picked her up at 7:30. The widow is living today at her home in Traverse City.

Another rescue story is worth repeating. One February day in the severe winter of 1936, the same captain, commanding *Ann Arbor 6,* was dispatched to Manistique to take on a carload of hay and other supplies for South Manitou Island, where 200 head of cattle were near death from starvation in the deep snow.

For ten hours the ship struggled through heavy ice before reaching the island—a trip that normally took four hours. Captain Larson backed in as close to shore as he could and his crew unloaded their cargo on the ice. The island had about 150 inhabitants. The skipper invited them on board for refreshments. As a result of his mission, all but ten of the 200 cattle were saved.

Later that month, Captain Larson's boat picked up four people from the same island, all four being dangerously ill, and took them to the mainland for hospitalization.

In fact, South Manitou Island has been the scene of many a maritime adventure. A hundred years ago, on June 8, a windjammer was wrecked there, and while the lighthouse keeper was helping to rescue the passengers and crew his wife gave birth to a son. And in 1940 *Ann Arbor 6* was driven ashore there by the Armistice Day gale and had to keep her engines working at half speed to keep from being blown out to sea. Next day, after the wind died down, *Ann Arbor 7* went to the island and pulled her out of the sand.

Carferries have had some freak accidents. For example, when the *Ann Arbor 3* was on her way to Frankfort one wintry day, the very thick ice near shore lifted her bow a considerable height above the water line, her weight being sustained by expanded ice frozen solid to the lake's bottom. Curious spectators walked over the ice from shore; some drove out in automobiles.

THE GRAND TRUNK started its carferry business in 1906, between Grand Haven, Mich., and

(Continued on page 63)

PERE MARQUETTE FERRY, steaming out of port past ice-coated signal light, heads into open waters of Lake Michigan. Each ferry leaving port and entering harbor has individual signal, which she blasts from whistle.

AFTER fighting 75-mile gale at 20 below zero and losing many freight cars, *Ann Arbor 4* finally reached Frankfort breakwater, where her crew escaped onto ice-shrouded cement pier.

TRACKSIDE GRAVE

The Division Hated His Guts, but When He Died They Buried Him on the Right-of-Way With Full Brotherhood Honors

DOWN on the Atlantic Division of the SG&A, exactly 51.2 miles north of Port City, you can see a small plot of grass, outlined with whitewashed stones and a granite slab on which is chiseled the name *Duncan*—an oasis of green in a drab wasteland. There's a tree, too, a lone palmetto, the only tree for miles around, and on the other side of the track you can see a station sign, also Duncan.

But there isn't any station. Nor a single human habitation. That splash of color on the right-of-way is a tomb. Not the last resting place of a link-and-pin pioneer nor the tumulus of a man who loved his railroad so much that it was fitting for him to be buried there beside the dusty track. Nothing of the kind.

Maybe you know the legend. They tell it in the washrooms, the switch shanties, and the call offices, every spot where SG&A men gather to chew the fat in between crew assignments. The whole division hated that man, but it gave him the highest accolade a railroad division can bestow—a trackside grave, not

by JACK McLARN

to mention a special train to the funeral and a third of a baggage car filled with flowers. Sooner or later, if you should ride the SG&A down through the Southland, you'll hear the story.

YEARS AGO, when oil was struck thereabouts, Port City changed from a rundown little water terminal into a brawling boom town. Overnight, almost, oil refineries sprang up and the harbor facilities grew, the weedy sidings were jacked up from gray mud, and the Atlantic Division suddenly became hot stuff.

Tankers spewed oil and gasoline into long, empty, storage tanks by the millions of gallons. Refineries were running full time. Word came from the big office: Move it—and fast!

The division rocked back on its rundown heels. Ancient steamers of the 800 series, jerked out of retirement and given baling-wire and chewing-gum overhauls, were the heaviest power the neglected roadbed could take. They doubleheaded in groaning pairs, the crews turned on their rest, the yard crews switched cars in their sleep.

It was a mess—a smelly, sweaty mess! Crude oil, high octane, and even that hair-lifting and loaded-under-pressure-and-prayer LPG—liquefied petroleum gas—poured in a deadly torrent out of Port City, across the riprap country to the main line at Branchville, while the safety valve of the Atlantic Division simmered and shimmied.

There was one more thing to do. Get men! "Buck" Quillen, the superintendent, was laid up with stomach ulcers, so the college-trained, bespectacled Johnny Harrison, pulled off an assistant's job somewhere and dropped behind the trainmaster's desk, was doing just that. Guantanamo Smith, the Trainmen's iron-fisted local chairman, was standing watchfully by to see that Johnny didn't foul things up

too completely. The roundup began.

By telephone, telegram, and registered letter, the call went out. From filling stations and drugstores, bus lines and farmhouses, the cutoff men came trooping back, protecting the thing you guard with fanatic jealousy—seniority.

It was late afternoon. Guantanamo Smith had gone out for coffee, leaving Johnny alone. Johnny didn't notice right off the runty character standing patiently before his desk.

At length he looked up and blinked. "Uh?" he said sleepily. "Sorry. Name?"

The newcomer eyed him as if trying to remember something. He wasn't like the motley crew that had cluttered up the super's office all day. His suit had once cost plenty. His hands were soft. A blue-white diamond flashed fire from one finger. But there was something oddly blank about him, as if the color had been bleached out, leaving vapidness.

"Duncan," he said flatly. "Brandt Duncan. I got a message."

Johnny's pencil probed the list. *Duncan, B., trainman.* He reached for an order pad.

"Okay," he grunted. "Duncan. Go get a check-up, then mosey back here. Take this to—"

A hoarse sound rumbled from the man's throat. Johnny glanced up. Duncan was staring toward the door, staring at Guantanamo Smith, whose six-foot-four bulk tensed like a coiled rattler. The local chairman toted a tin pail of steaming Java. He set it down on the table and gasped.

"Duncan! By all the gods—*Duncan!* So you crawled back?"

He peeled off his jumper and his face went mottled red.

Duncan edged away. "Hold it! Wait—"

The Brotherhood representative stalked closer, his great fists balled.

"I been promisin' meself," he boomed, "ever since th' day I took what was left of Mike Patrim off'n th' boilerhead of th' 802, I been promisin' meself this, if you ever hit th' grit here again. I been waitin'—"

"Keep off me, Guantanamo!" the job applicant warned, his own shoulders hunching. "I came clean. You spoke for me, remember. You and the rest. I'm a good brakeman. I got a white card—"

The griever's voice shook like his hands. "Yeah, a white card, you lousy, stinkin', drunken bum! May the saints forgive me! I did go to bat for you, Duncan, when every man on this pike knew damn well it was your short flaggin' that killed Mike and his fireboy. But this ain't no 'vestigation. This is between you and me."

HE LUNGED, and the short brakeman ducked under his muscular arm. The huge griever crashed into the wall. Raging, he whirled as Duncan faced him with the ferocity of a cornered swampcat. At that moment Johnny Harrison took a hand.

"Smith!" he barked, in a trainmaster's voice.

Guantanamo halted in midair and turned around. "Who, me? Say, cap, you'd better stay outa this. We got a score to settle."

Fury distorted the griever's face.

The bespectacled man at the desk spoke calmly. "I've read the file on Duncan. He did come clear. The book says he can work here, and so we called him back."

Duncan's expression showed disbelief as he edged away from the griever. But Smith was enough of a Brotherhood man to know he was outvoted. A big fellow, inside and out, he took the decision without a whimper. Picking up his jumper, he got into it and headed for the door.

"Okay, cap," he grunted, his hand on the knob. "You're the brass collar. But you're gonna be sorry, I think. And you—" He glowered at the runt. "Keep outa my hair! Any time you're off the right-o'-way, things'll be different."

After the door had banged behind him, Duncan inquired: "All right, mister, say it! Do I hit the road?"

Johnny shook his head. "Not for my money."

Duncan studied him thoughtfully. The trainmaster tried to read the pale blue eyes, and gave it up.

"I'm staying," the brakeman said flatly. "And—thanks. I'll remember." A dry chuckle seemed to come from nowhere. "You needn't bother checking my clearance. I don't think it'll be necessary."

Duncan passed his physical, which wasn't much. Johnny put him through a brushup rules check and marked him on the board. It didn't take Duncan long to get back in business. It didn't take Guantanamo Smith long, either. Buck Quillan crawled out of bed, gulped a few pills, and had Johnny on the rug before good daylight.

"This guy Duncan," he said without preamble. "Why?"

Johnny shot it back at him. "You cleared his record yourself. Name's still on the seniority roster. Book says to call him back. Doc says he's in one piece. He knows the Rule Book from cover to cover. You're the boss. Name it."

Quillan looked Johnny up and down. "So you talk back, eh?" he said, half admiringly. "But Duncan's a bad egg, Johnny. Wish I'd been here—"

Johnny stared back. "Okay," he said. "To please Guantanamo Smith, where do I nail the hide?"

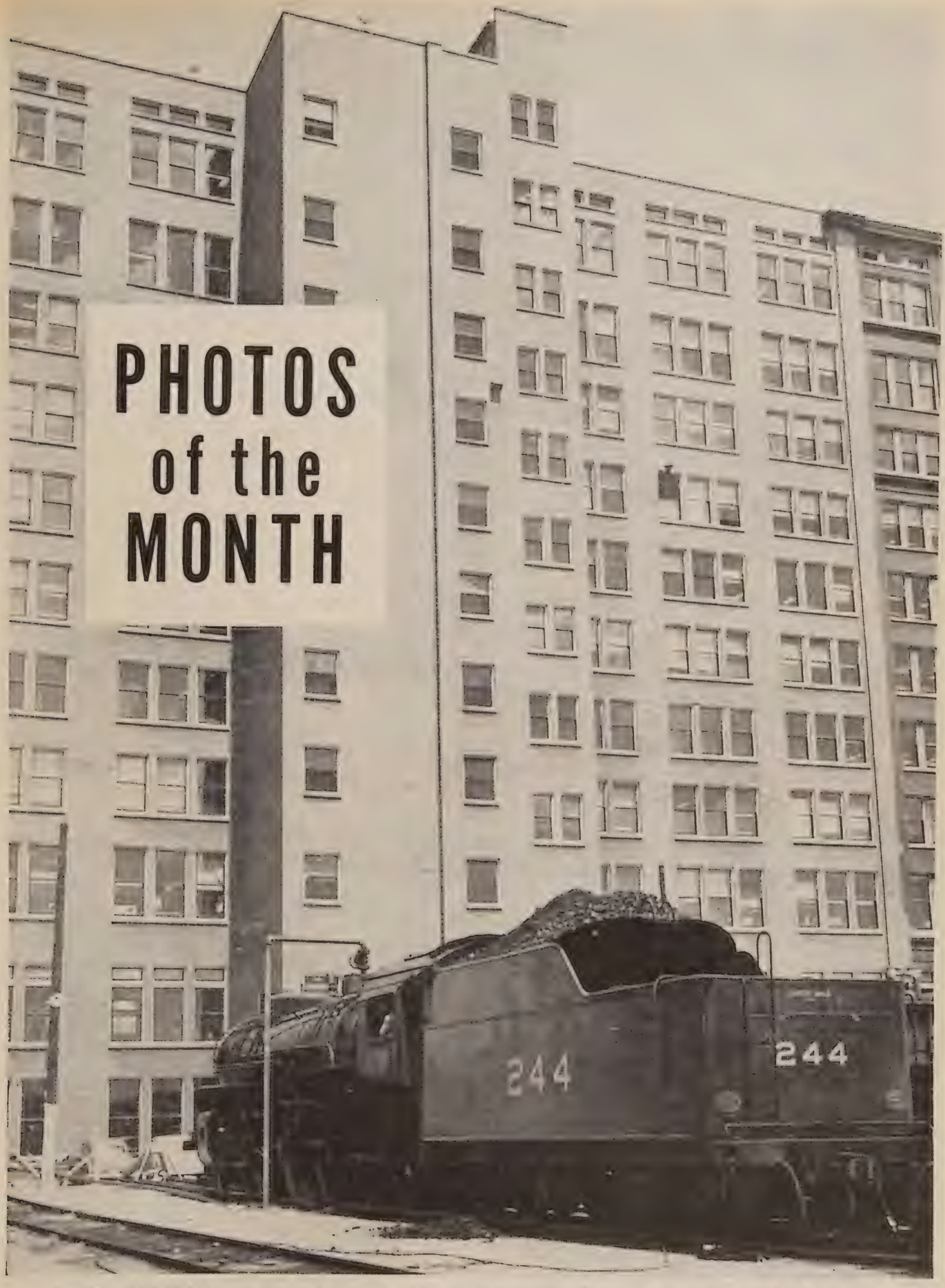
The superintendent groaned. "Ulcers, and now a smart boy for trainmaster." Then the chips went down with a clatter. "I want him off this division! That's an order. Now, I'm going back home."

IT WAS a tough assignment. But Johnny had help. With Guantanamo Smith in the lead, the division lined up solidly against Duncan. When the undersized brakeman walked into a washroom he had plenty of space on either side. At Ma Gannon's he ate alone—chilly, doughnuts and cold coffee, for Ma was a railroader's widow. Everywhere Brandt Duncan went he was isolated, his blue eyes motionless in his head, and he always seemed to be watching for something.

But Duncan knew his business; the Atlantic Division gave him credit for that. He was catlike on his feet, luckily for him. More than

(Continued on page 69)

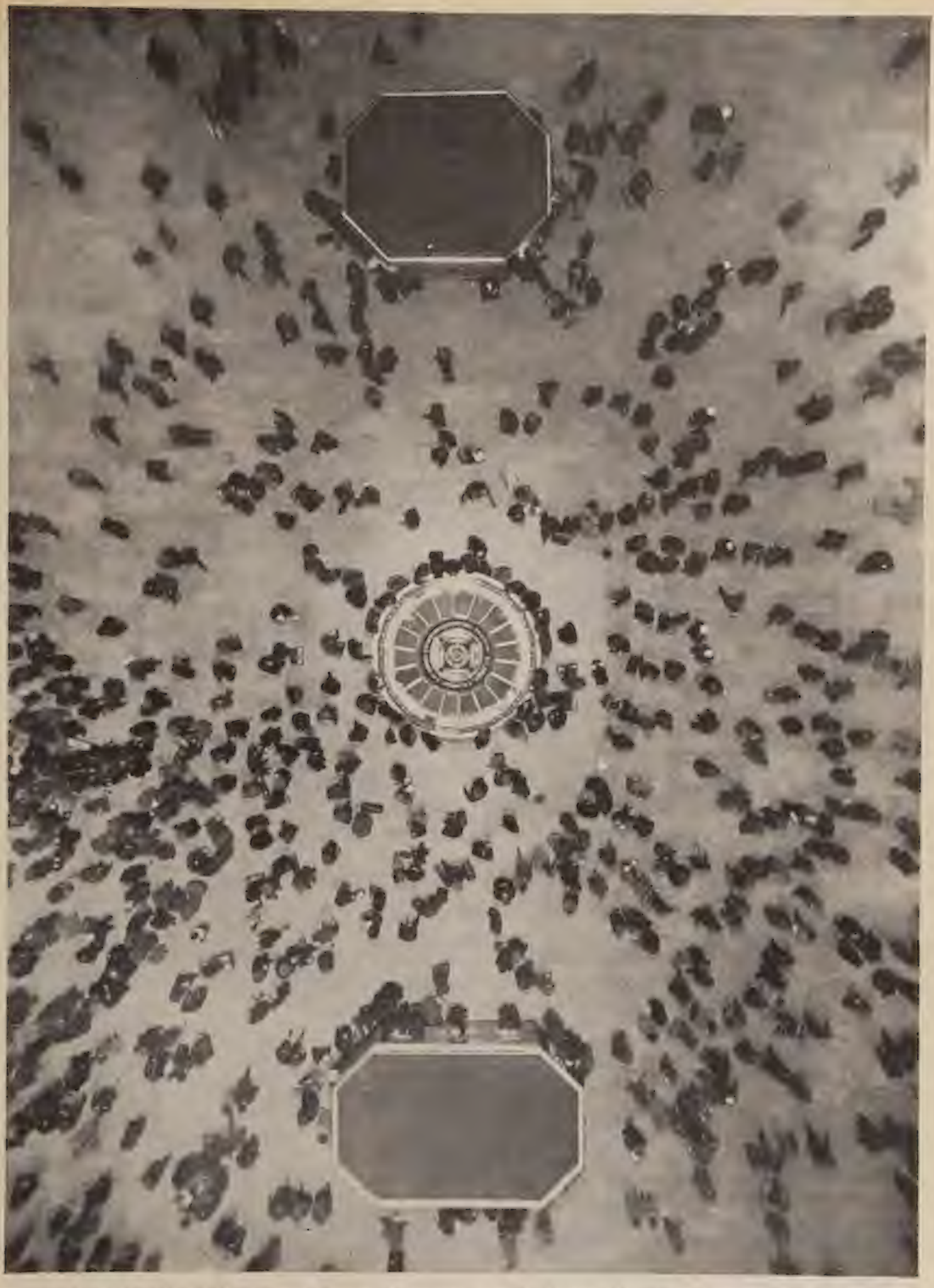
PHOTOS of the MONTH



UNION STATION and general office building at Louisville, Ky., was steam-heated by Louisville & Nashville engine No. 244 during a sudden cold snap while heating plant was being repaired.

New York Central

RELATIVELY FEW homes boast such luxuries as those on New York Central's *20th Century Limited.* You can turn two double bedrooms into a drawing room by folding back a partition. These rooms contain air-conditioning and heating controls, ice water, toilet facilities. Passengers have access to a train secretary, a radio-telephone, a barber, and a shower bath—all on board the New York-Chicago train! (Below) The westbound *Century,* pausing briefly in Buffalo for servicing at about one A.M., meets the eastbound *Wolverine* at Buffalo.

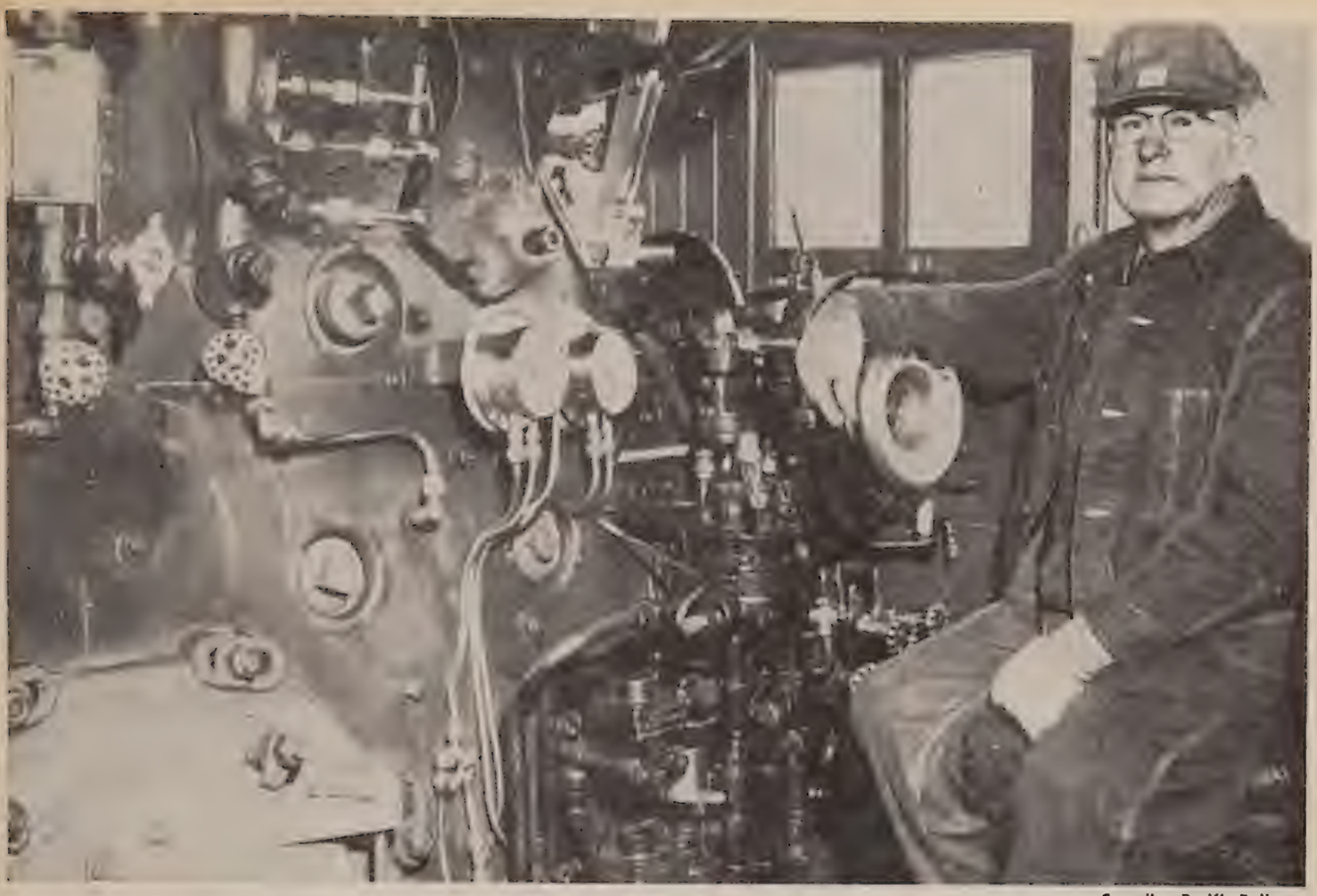


INFORMATION BOOTH, Grand Central Terminal—by Ed Nowak, New York Central photographer.

FUEL STOP at Southfields, New York, in days of long ago, when Erie eight-wheelers burned wood and rumbled over six-foot-gage track with brittle iron rails.

Walter A. Lucas Collection

REMEMBER the Florida East Coast Railway extension from the mainland to Key West? Completed in 1912, it thrilled the train-riding public until 1935, when a hurricane forced its abandonment.

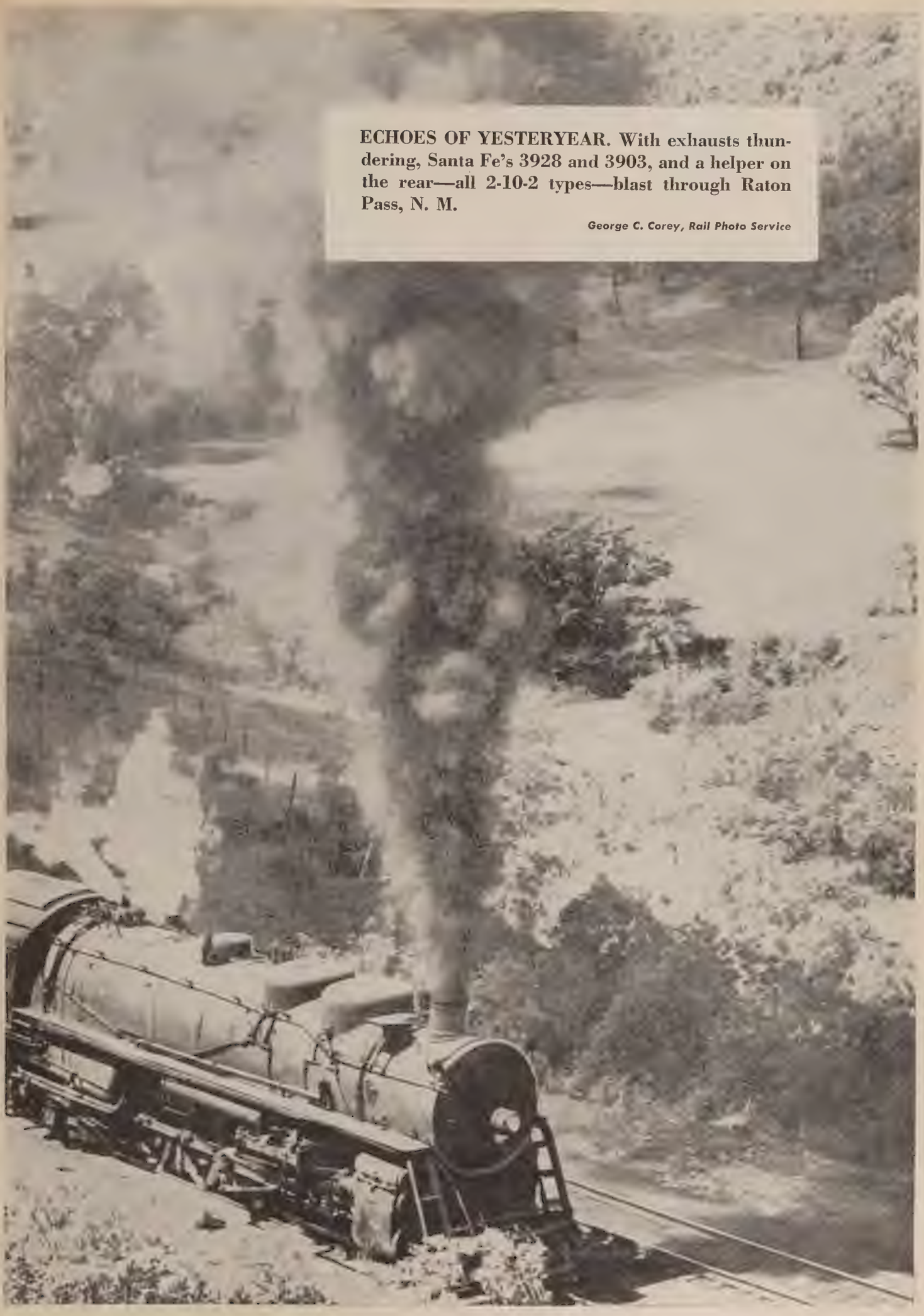


Canadian Pacific Railway

HIS OWN ENGINE. Engr. Bill Barrett's No. 2354, one of the few assigned engines on Canadian Pacific's Prairie Region, pulls trains between Calgary and Lethbridge. A coal-burner, she now uses oil.

VEILED in steam and smoke like a bride, this Reading gal made her maiden run to Jersey City years ago.

Herbert Weisberger



ECHOES OF YESTERYEAR. With exhausts thundering, Santa Fe's 3928 and 3903, and a helper on the rear—all 2-10-2 types—blast through Raton Pass, N. M.

George C. Corey, Rail Photo Service

NORTHERN PACIFIC still uses steam on its Tacoma Division. Photo by W. Wilkinson shows a 2-8-2 pulling a diesel to South Tacoma shops for repairs.

INFORMATION BOOTH

Ask Barbara

RAILROAD QUESTIONS are answered here every month by our research expert—as many as space permits. Top priority is given to subjects that seem to be of wide general interest. Address Miss Barbara Kreimer, *Railroad Magazine*, 205 E. 42nd Street, New York 17, N. Y. No replies will be sent by mail.

1

Question *What is the "fireless cooker" type of locomotive?*

Answer This was a nickname for steam storage engines built by Baldwin Locomotive Works and H. K. Porter Co. of Pittsburgh before the days of diesel locomotives. They were designed especially for industries handling highly combustible materials. Chemical plants, cotton storage warehouses, refineries, etc., could hardly afford to move their products and supplies by regularly fired steam engines, so fireless cookers were built for their traffic. Each was equipped with a steam storage reservoir which resembled a boiler. Steam was pumped into it from an outside power plant, and enabled the engines to operate for several hours at a time. The Santa Fe used the fireless cooker for a while, and the Navy included it in its Brooklyn, N. Y., yards.

2

Q *Can the new streamlined Budd cars pull an additional car or trailer?*

A No. They are not designed to haul extra cars or additional poundage. In emergencies, one of them might be able to pull the weight of another car, but even in these cases rules governing its operation are strict.

3

Q *Is there any steam left on the Boston & Maine? What happened to engine No. 3715?*

A The only steam-operated train on the now-dieselized B&M is used in commuter passenger service in and out of Boston. The 3715 has been scrapped.

4

Q *Does the Florida East Coast still use oil-burning steam locomotives?*

A FEC oil-burners operate chiefly in the Fort Pierce area, although some switching is done at the Bowden and Miami yards. Steam also helps out on freight trains during periods of particularly heavy movement. Here are the oil-burners now in service:

Series		*Wheel Arrangement*	*How Many*
251-279	8-wheel switcher	0-8-0	18
401-452	Heavy Mountain	4-8-2	2
801-823	Heavy Mountain	4-8-2	15
701-715	Mikado	2-8-2	10

All FEC passenger service and 75 per cent of the freight runs are dieselized.

5

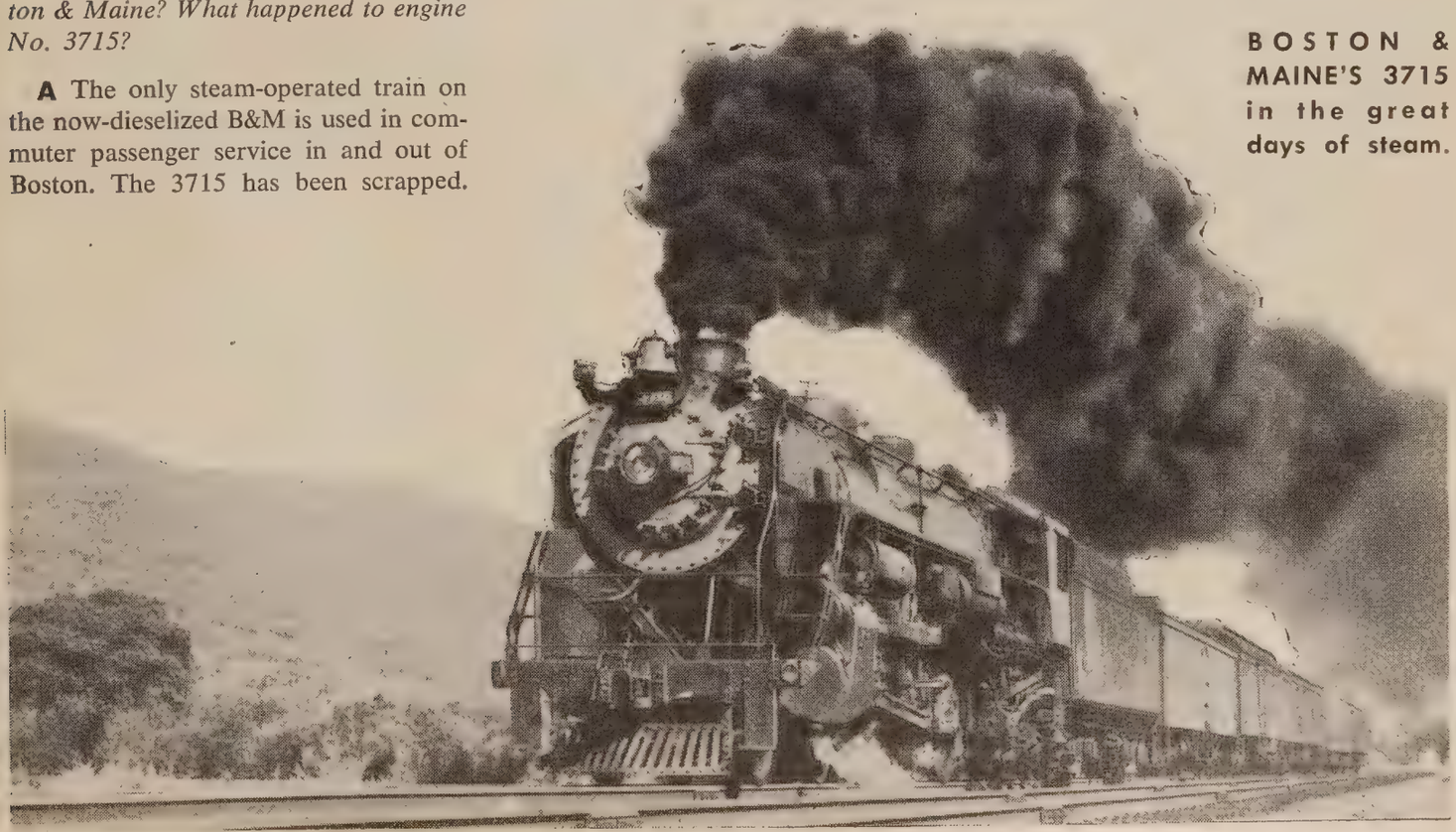
Q *I have heard that railroads use fog signals, although I've never seen one. Do you know anything about them?*

A No. Usually red fusees, or flares, are used to stop trains in foggy weather. Nor have we heard of a railroad whistle or horn such as are used on boats and along dangerous shores.

6

Q *Who originated the X-shaped railway crossing sign?*

A There are conflicting claims as to the origin of this device, which is technically known as a "cross-buck" sign. They were first used on the old Pitts-



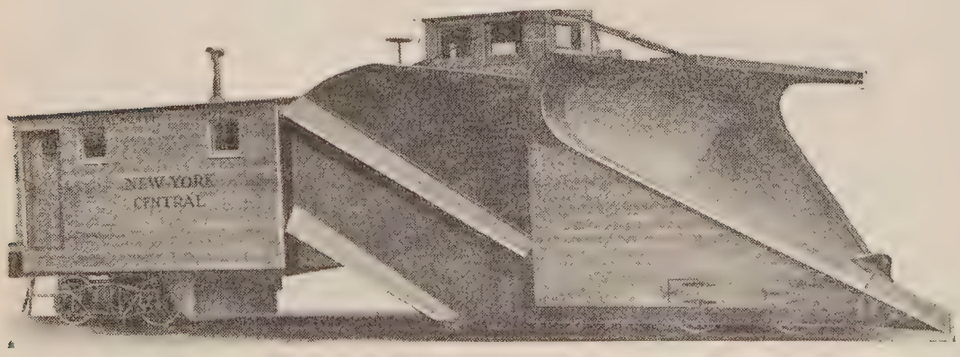
BOSTON & MAINE'S 3715 in the great days of steam.

Nickel Plate Road

FAMILIAR X-shaped warning signs which mark railroad crossings are now made up with reflectorized coatings so they may be read at night as well as during the day. Here Nickel Plate carpenters get ready a fresh batch.

burgh, Cincinnati & St. Louis (now PRR) as early as 1879, although they did not originally include the familiar words, "Stop, Look and Listen." One source says the warning words were added in 1929 after a cash prize had been offered by an Eastern road for the best legend to place on the highway. According to another account, Col. J. C. Fuller, in charge of construction on the old Gettysburg & Harrisburg (now Reading Co.), picked up the message from a judicial decision which read: "It is the duty of everyone to stop, look and listen before crossing a railroad." An article in the Burlingame *Advance* stated that Thomas H. Gray, a pioneer resident of Burlingame, Calif., and once affiliated with the Southern Pacific, thought up the slogan in 1884.

Although it is difficult to determine just when the cross-buck first made its appearance, there is evidence that warning signs were erected at grade crossings during the earliest days of railroading. In New England, for example, types of grade-crossing signs date back to 1835 when they were compulsory in Massachusetts. Some of these were simply boards spanning the highway and supported by poles on either side. Caution was recommended in big letters painted on the boards which read, "Look Out for the Engine While the Bell Rings!"



A WELCOME SIGHT when the snows are high is the Russell single-track snowplow, equipped with wing elevators, flanger, and ice diggers.

7

Q *How many 5600 steam locomotives on the Burlington are still in service, and where?*

A The Burlington's dieselization program has expanded to handle nearly all train movements along the entire system. Only 34 steam locomotives of the 5600 series remain. These, not assigned to regular runs, are used in extra work as they are needed. They are stored at Clyde and Galesburg, Ill., Lincoln and McCook, Neb., and Denver, Colorado.

8

Q *How does the Russell single-track snowplow operate?*

A This all-steel snowplow with wing elevators and flangers is an important development in snow-fighting. The plow's weight, over 86,000 pounds, is distributed so that the center of gravity is lower. The plow's body is carried on two four-wheel modern steel trucks, with cast steel side-frames and bolsters, equipped with standard wheels, axles, and 5 x 9-inch journals.

The moldboard and slope of the bit are designed to handle snow easily. The top fender is raised and extends over the plow's nose. The front is fitted with a permanent coupling casting made of steel of rugged construction.

One feature of the Russell plow is the power bar, a steel member which takes the thrust of the locomotive through the rear coupler and runs through the hollow center sill to the front end of the plow frame where it is pivotally mounted. This helps take care of the thrust on curves without causing derailment. All-steel wing elevators increase the width of the path the plow makes by three feet on each side, while a flanger cleans between the rails. With wings extended, this plow makes a sloping cut of 11 feet, 10½ inches, at the bottom, and 16 feet, 5 inches at the top of the wing.

9

Q *What kinds of signals are used by trainferries on the Great Lakes?*

A Signals among crew members for the operation of the boat herself are given through bells or engine-room whistles by the navigating officer on the ship's bridge to the engineer. If the vessel is standing still, one blast means to go ahead; if she is moving, the blast means to stop. Two whistles mean to go back, three to check, and four indicate "All right."

In operation among other ships, one whistle blast means the captain is directing his course to starboard, the right side of the ship, and two blasts mean that he is directing it to port, left side of the ship. A series of three short whistles, repeated at intervals of not more than a minute, are given when the weather is foggy to indicate the ship's position. Ship lights, generally placed near the pilot house, are green on starboard side, and red on port side.

10

Q *I understand the Indiana Harbor Belt is building a new modern freight classification yard. Please tell me something about it.*

A This yard is part of a $3,500,000 IHB improvement program and is located at Blue Island, Ill. The Belt line is the only one connecting all 28 railroads in the Chicago area. Trains made up at Blue Island head east over the Central to Detroit, Cleveland, Buffalo, Boston, and New York.

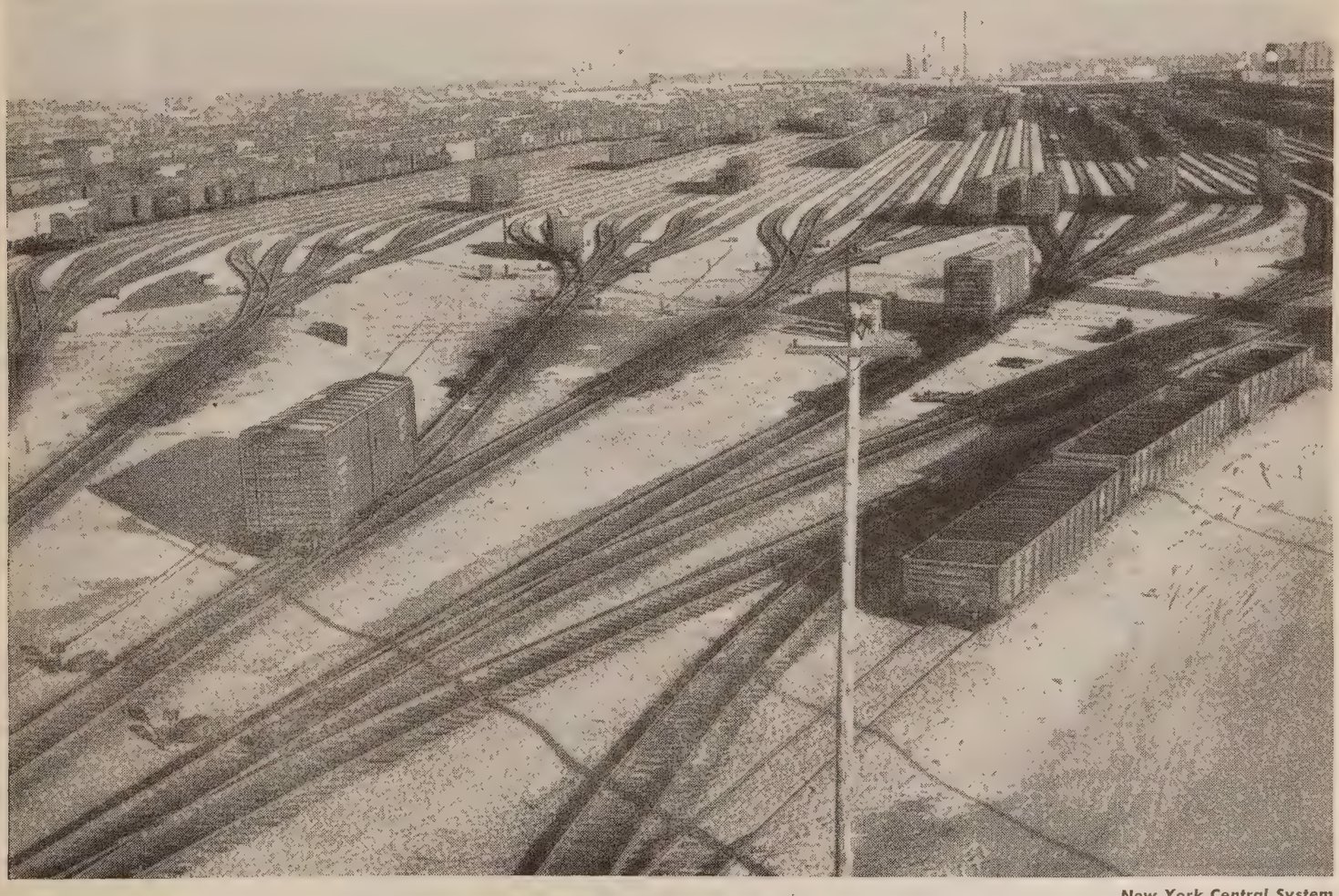
The original yard had only 30 classification tracks, not enough to handle the traffic which has increased in recent years. The yard, now rebuilt and expanded, includes 41 classification tracks with capacities of 50 to 75 cars each. More than 3,000 cars a day are moving through the Blue Island, and the number is expected to reach 4,000.

One outstanding feature of the new layout is the use of single, extra-long car retarders in place of a series of shorter ones, to speed up operations. Retarders 115½ feet long operate at six points leading to groups of tracks. Control of all of these is centered in a single tower. There is an additional 77-foot retarder at the crest of the hump. The routing of cars is guided by a switch-machine operator in the new hump tower, and cars can roll down the hump as fast as 18 miles per hour.

11

Q *How many railroad emblems feature animal pictures?*

A We know of several. The Great Northern emblem shows a mountain goat, the Canadian Pacific a beaver, and the Belfast & Moosehead Lake a moose head. The Missouri Pacific's first emblem showed a steer which accompanied the slogan, "Steer for the Mountains." The Delaware & Hudson used to have a deer head with spreading antlers, and the Intercolonial (now part of Canadian National) another moose head. There may be a number of other such emblems we are not familiar with. Usually the animal chosen for a railroad insigne is representative of the territory through which the line is routed. The Algoma Central & Hudson Bay, for instance, has a black bear trade-mark which is easily identifiable with the woods district surrounding part of its run. Some of these bears are raised as pets of the section men and extra gang workers along the AC&HB line.



New York Central System

IMPRESSIVE NETWORK of track forms the sprawling classification yard of the Indiana Harbor Belt, Blue Island, Ill.

Davart

HEADLIGHT back of tender helps guide night traffic on Rahway Valley yard goat in New Jersey.

12

Q *What is a signal bridge?*

A The signal bridge, built across one or more tracks, is designed to carry signals which can easily be seen. The usual type is a lattice truss, spanning the required number of tracks and supported on two steel bents located at the sides of the track and footed on a concrete pedestal foundation.

Such structures are of relatively light section. The live load used in design may be assumed at 400 pounds per foot of bridge. The lattice truss spans, upon which the signals are supported, are ordinarily seven feet deep, and five feet to center of the trusses.

13

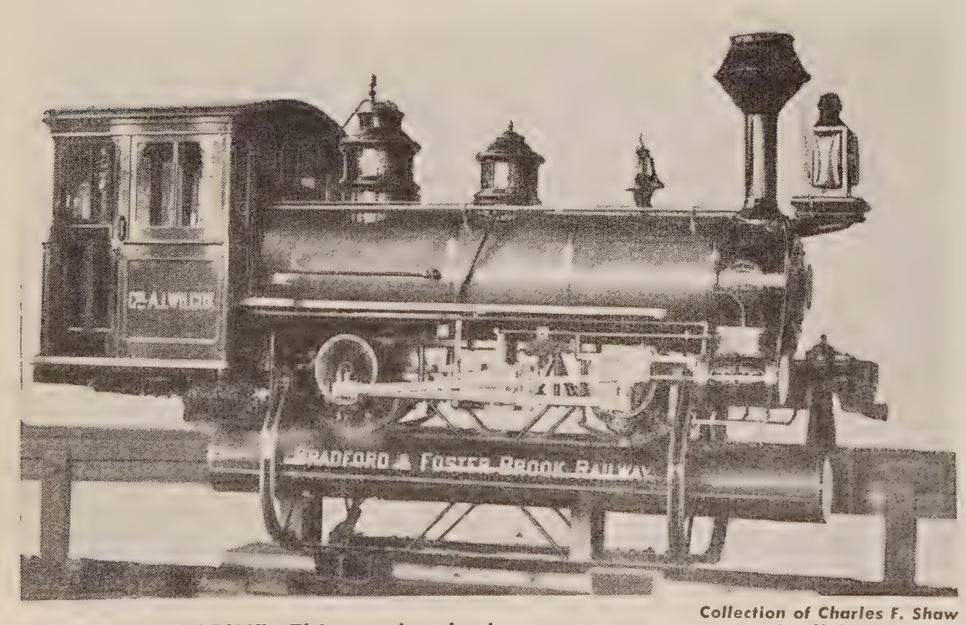
Q *Why do some locomotives display an additional headlight on the rear of the tender?*

A Any engine which has to move backward at night, and cannot be maneuvered on a turntable, has such a lighting setup. Yard goats operating in both directions, as well as most diesels, are equipped with two sets of headlights.

14

Q *What was the "Pegleg" Railroad?*

A This was the Bradford & Foster Brook line, one of several so-called monorail types projected or built during the last century. The entire B&FB track structure was built several feet above ground. It supported a carrying rail and one or two stabilizing rails. Unfortunately, the B&FB trains had a tendency to roll precariously when they reached speeds above 25 miles an hour, and as balance was important for smooth operation, traveling by pegleg was not always safe or comfortable. Contrary to the claims of many monorail enthusiasts, this type of railroad was costly to build and maintain, and was impractical. The Ballybunion Road in Ireland, a monorail operated on the same principle as that of the B&FB, ran successfully for a number of years.



Collection of Charles F. Shaw

MONORAIL ENGINE. This pegleg looks as strange now as it did in 1880.

Running Extra

J. W. LYDON, editor of *The Soo-Liner,* 5th St. and Marquette Ave., Minneapolis, Minn., is looking for a picture of James Dutch, Soo Line locomotive engineer of the 90's, who was on train No. 7 the night it was wrecked at Heafford Jct., Oct. 8, 1894. Perhaps one of our readers can help out.

In a recent issue, we asked readers where steam locomotives might be photographed today. In view of the number of places suggested in letters we have received, we are confident that steam fans can still get plenty of interesting shots. According to one enthusiast, 90 to 100 trains a day, nearly all steam, can be found on the peninsula between San Francisco and San Jose. Along this stretch, we are informed, there are many towns and stops where you can take pictures, and highways run along both sides of the track for a considerable distance. Another report mentions the B&O run between Pittsburgh and Braddock, Pa., as rich in steam traffic. Other tips on this popular subject appear from time to time in our *Mail Car* and *Railroad Hobby Club.*

Information on a narrow-gage B&O run was requested by M. L. Arnold. We now hear from William H. Cramer, 118½ S. Randolph St., Garrett, Ind., that the old branch line running between Butler, Foxburg, and Kane, Pa., is still in operation. He says his father was B&O trainmaster at Butler from 1951-'53; he himself was a yard clerk.

"The B&O operates a daily local each way between Butler and Foxburg, and one each way between Foxburg and Mt. Jewett," writes Mr. Cramer, "and there are switch runs between Butler and Bruin, and Mt. Jewett and Kane. The branch is known on the timetable as the Northern Subdivision of the Buffalo Division (formerly BR&P Railroad), but is handled by crews and operators of the Pittsburgh Division."

A letter from Eddie Scovel, 1427 Garden Court, Rockford, Ill., says he is trying to get in touch with two brothers, Lewis and Eddie Jones, who had long careers in railroading. The Jones brothers started out working together for the Pacific Electric in Los Angeles. Later, Eddie Jones put in time as a switchtender on the Illinois Central, and then as switchman on the Erie before moving to Waterloo, Ia. Can anyone locate the Jones brothers? •

CANADIAN PACIFIC diesel threads her way through the Rockies beside Bow River.

TRUE TALE by

SIM WEBB

I WAS CASEY JONES' LAST FIREMAN. We were pulling the *Cannonball Express,* the Illinois Central's crack Number 1 train, on the foggy, drizzling night of April 29, 1900, when she plowed into the rear end of a freight near Vaughan, Miss. A few seconds before, Casey had stood up, kicked his seatbox back, reached for the whistle, and yelled at me, "Jump, Sim, jump!" Those were the last words he said on this earth.

Our regular run was out of Memphis, Tenn., to Canton, Miss., and back, and we had just completed it and come in to wash up when we learned that another engineer, Sam Tate, was sick, and somebody would have to take his run for him.

Casey asked me: "How about it, Sim?" and I said, "I'm with you if you want to go," and we went down to the office to sign up for that trip that was to be his last.

At the roundhouse we found 382 hot and ready to go. Most engineers at that time used the same engine, no matter what the run was. Old 382 was Casey's. We looked her over to see that we had tools, plenty of oil, and everything, and sat around to wait.

We were supposed to leave Poplar Street depot in Memphis at

CASEY JONES TOLD ME TO JUMP

Aged Fireman Gives His Own Version of What Happened That Foggy, Drizzling Night of the "Trip to the Promised Land"

11:30 P.M, but One was late getting in, and so it was one o'clock before we finally pulled out of the station and headed into the night.

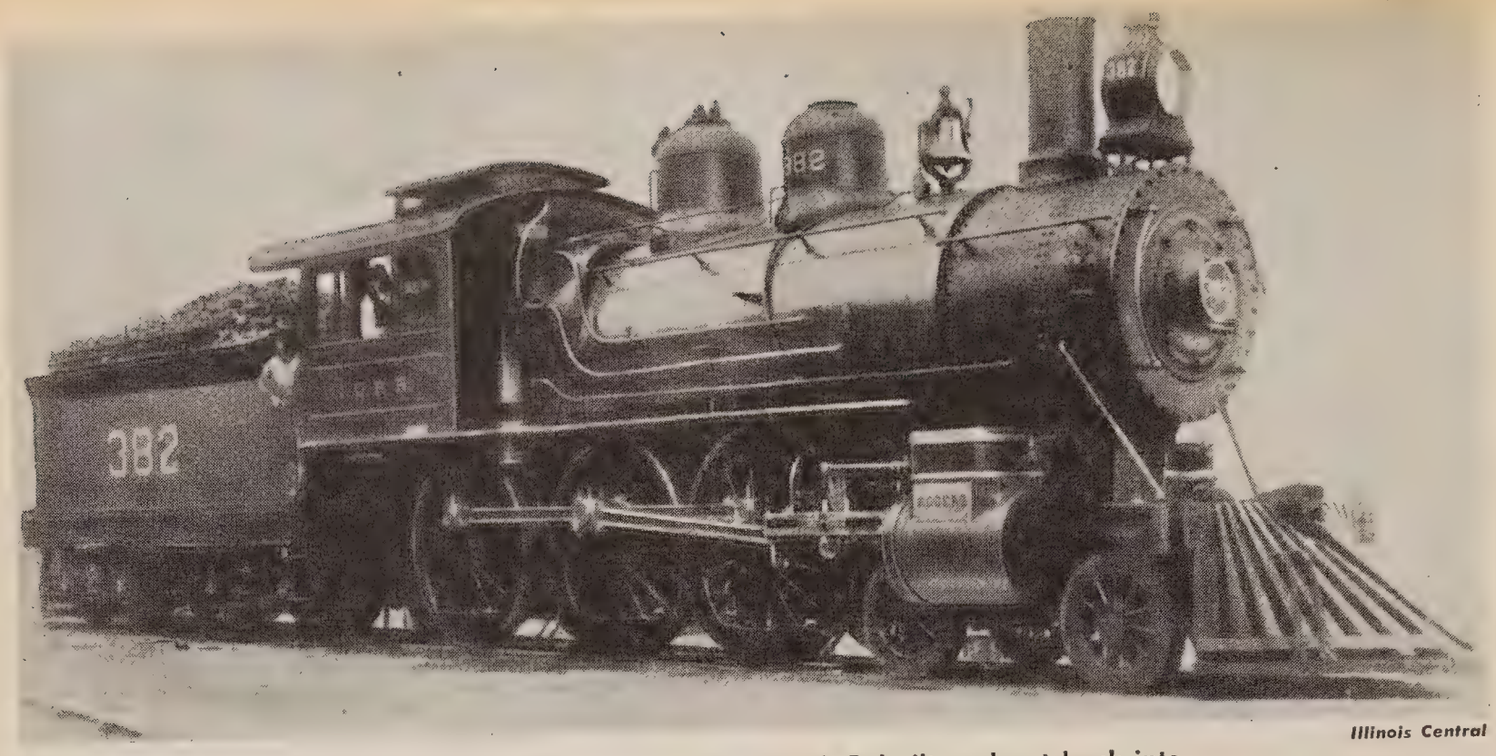
We'd been having rainy, foggy weather for two weeks, and that night the clouds were mighty dark and low. But Casey seemed to be in an extra good mood. He opened her up and said:

"We're going to have a pretty tough time getting into Canton on the dot, but I bet we can do it, barring accidents."

And I told him: "You can depend on me, Mr. Casey. I'll keep her hot."

In those days the Illinois Central set great store by an engineer that could get there on time, and they didn't ask too many questions about how he did it. Casey was a good man. He had what we called "throttle touch," which meant he could get all there was to get from his engine. That night he was determined to make up lost time before we got to Canton, and he almost did.

Sardis was our first stop. That's



Illinois Central

OLD 382 catapulted Casey into legend. Rebuilt and put back into service, she killed three more men before being scrapped in 1935.

about fifty miles. We'd been doing all right. At some places we got to clipping off a mile every fifty seconds. Old 382 was steaming mighty well that night and using very little fuel. I hadn't even taken down the top coal gate on the tender. It took us an hour and two minutes to make Sardis, including a stop at Central station. Everything was working just fine.

We roared on south, whittling that lost time away to nothing, in spite of stops at Grenada, Winona, and Durant.

Casey was still in high spirits. Just outside of Vaughan, only eleven miles from Canton, he stood up and hollered to me over the firebox: "We'll make up that time before we get to Way, and coast in from there."

Way was just six miles from the end of our run.

"Oh, Sim," he said, "the old girl's got her high-heeled slippers on tonight! We can do anything!"

Down at Vaughan, trouble was piling up. A southbound doubleheader freight had headed into the siding at the north switch. At the south switch was a northbound common freight, the kind we call a "slop." A southbound train stood waiting to pass on down the main line. The trouble was that the siding wasn't long enough to hold both freight trains, so, when the southbound moved on down the main line past the north switch, the doubleheader backed out onto the main line, and the slop freight moved in onto the siding in order to clear the south switch and the main line for the southbound train.

G. H. Peacock

LAST STOP for Casey: siding at Vaughan, Miss., now guarded by semaphores.

In the excitement of clearing the train, everyone forgot about us coming down from Memphis. Casey knew a freight was due to be over there, but he supposed the track was clear, and so he came on without slackening speed or anything.

Now Vaughan is at the lower end of a double S curve, and the north switch is about the middle of the first S, so I was the first to see, from my side of the cab, something big and black blocking the main track.

"My Lord," I gasped, "there's something on the main line!"

Just at that moment Casey saw it, too, and yelled: "Jump, Sim, jump!"

I swung out, crouched down as far as I could, and joined the birds, just as the train plowed into whatever was on the track.

It turned out to be the tail end of that doubleheader freight still out on the main line at the north switch. Old 382 went through the caboose, a carload of hay, another of shelled corn, and came to a stop in a load of lumber.

Our engine never left the track. She was just stripped of cab, running boards, and piping. Our coal tender was turned at right angles across the boilerhead, and the front

end of our mail car had climbed up on our water tank.

One of the trucks had rolled over me, protecting me so that, although I was badly shaken up, bruised, and nervous, I did not get seriously hurt. Not one of the passengers was hurt, but Casey Jones went to glory. They found him down by the back driving wheel, out in the clear, with an iron bolt driven through his neck, a bale of hay resting on his chest, and corn scattered about. In his lifeless left hand was clutched the broken end of the whistle cord.

We had hit Vaughan at 3:52, two minutes behind schedule. But for the accident, we would have passed Way on the dot.

THE RAILROAD investigated the wreck, of course, and I told them just what I am saying now. I told them that Casey was eager and high-spirited. He liked to keep things moving and make his schedules, but he was not reckless. The only life he ever lost was his own.

Casey was a fine man and took fine care of his engine. The brass collars had reprimanded him several times for taking chances, but that was all.

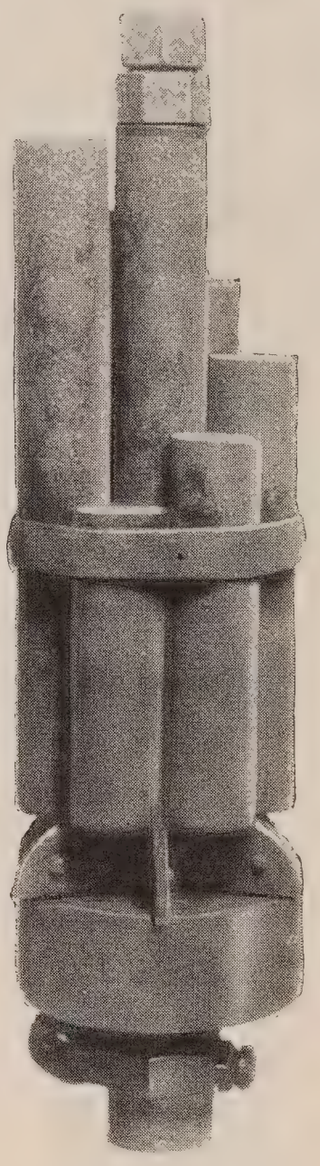
Many hoggers were careless about reporting engine defects or they ran out of water and had to wait on a siding somewhere till the tank could be refilled. Casey could get more miles out of a tank of water than any man on the road, and he could gage it so that it lasted until he got to a water tower. You never lost time with him, waiting for water.

The inquiry tried to make him out a foolhardy fellow who liked to show off. He did like to show off, but not in a foolhardy way.

Casey had his own whistle, formed by six slender tubes banded together, the shortest being exactly half the length of the longest. In those days it was common for engineers to have their own whistles, and each man had a special way of blowing them so everyone along the right-of-way would know who was coming through. Casey's sounded like a whippoorwill, and when people heard it they said: "There goes Casey, right on time!"

That last night, when he blew for Vaughan, he had called over to me, "Oh, Sim, we'll sure wake 'em up in Canton this morning with this new whistle!"

Both of us were pretty young at the time. I was twenty-six, and



Illinois Central

CASEY'S six-tube whistle could scream like a banshee or say its prayers.

Casey thirty-two. I had a wife and baby back in McComb, Miss., and he had a family, too.

Casey had not been on the Memphis run very long, and he was looking around for a house to move his family into. His wife said that the day after the wreck she got a letter from "J. L.," as she called him, mailed the day before, telling her that he had found a place he thought she'd like.

That morning, though, nobody told her what happened. She had just gotten the three children off to school and was on the porch shaking out some rugs when a neighbor came slowly up the walk. Mrs. Jones took one look at her face and asked: "It's Casey, isn't it?"

"Yes," said the neighbor. "He's dead."

Casey wasn't his real name. He was christened John Luther, but he was born and grew up in Cayce, Ky., and when he went to work for the railroad there were so many other Joneses that a foreman nicknamed him "Cayce," and pretty soon they began spelling it the way it sounded, Casey. He was a tall man, about six foot four, with gray eyes and coal-black hair, and he got himself a reputation on the IC as a "fast roller." When he died he became a legend.

In 1938 a memorial was erected to him in Cayce. I went up for the ceremony and made a speech. It stands in the southeast corner of the schoolgrounds—a stone shaft surmounted with a replica of his engine, Number 382, and above that his name.

Senator Barkley was there—he later became Vice President—and at that time he had just come back from Europe. He made a speech in which he pointed out that in this country a simple man like this one could become a hero and an inspiration to those around him.

Only part of my adult life was spent on the railroad. I was born in McComb and lived there until I left school at eighteen and hired out on the Illinois Central as a callboy. Later I became a locomotive fireman. I thought I was pretty important then, with a wife and baby and a good job. Then I went to Water Valley, Miss., where the IC shops are, to work under Master Mechanic F. C. Locey, and was chosen to go to Memphis and make this run. I went to Memphis January 1, 1900, so I fired for Casey just about four months.

After the wreck, I returned to McComb. For about a year I didn't

do very heavy work, just odd jobs around town. Then I went back to railroading in Memphis on the same run I'd had, and I fired eight years for the engineer who took Casey's place.

In 1918 I was involved in another wreck. A trestle gave way and I went down with the engine. That time I had to claw my way out, but I did get out finally, with a cigar I had been smoking still clamped in my teeth.

I have worked for the railroad, off and on, all my life. In 1935 I was off, but they called me back and I worked for several years. Now, though, at the age of eighty, I am through with that kind of work.

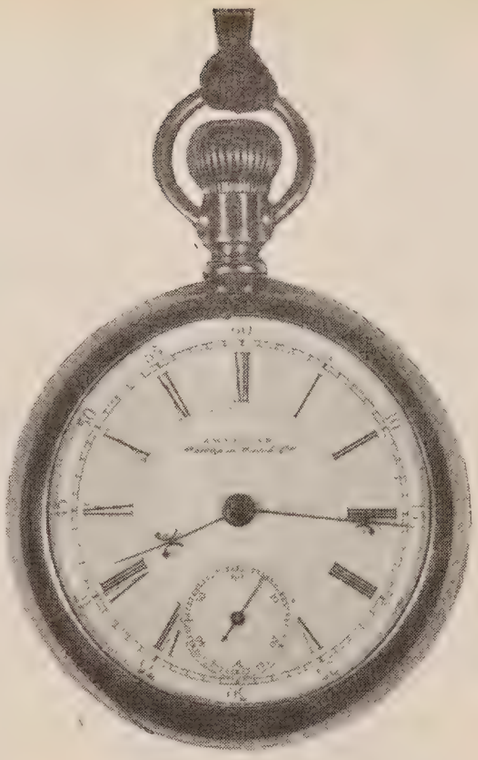
BEING in that wreck has changed my life in many ways. I hadn't thought much about it, until I realized not long ago that I am the only man living who knows about that wreck first hand. People come from different parts of the country to talk to me about it.

A funny thing happened a few years ago. I went to New York for a radio program called "Twenty Questions." Casey Jones was the name the contestant was supposed to identify, and when he asked if the person was real or imaginary, the master of ceremonies said, "imaginary." That really brought a storm of protest from all over the country and particularly from people who had known Casey. The man on the show finally had to put it in writing that he had been mistaken.

I've been to New York four times to appear on radio programs. Each time I told about the wreck and my association with the hogger who was killed. There is a Casey Jones Postage stamp, too. They had a celebration when it was issued in 1950 and I made a talk.

In 1947 Lucius Beebe and Charles Clegg donated a granite and bronze marker for the grave in Jackson, Tenn., where Casey is buried. I went there that time. Mrs. Jones and her family were there, also, and a granddaughter unveiled the monument. The mayor of Jackson showed up, too. The epitaph reads:

JOHN LUTHER JONES
To the memory of the locomotive engineer
Whose name as "Casey Jones" became a part of folklore and the American language.
"For I'm going to run her until she leaves the rail
Or make it on time with the southbound mail."



Illinois Central

CASEY'S WATCH, now carried by his son Charles, also an Illinois Central man.

Illinois Central

SIM WEBB, the only man alive who knows from first-hand experience what caused the wreck, as he looks today.

WIDOW AND SON are living today at Jackson, Tenn. Mrs. Jones never remarried.

CASEY JONES, a giant of a man, with coal-black hair and soft gray eyes.

Press Association, Inc.

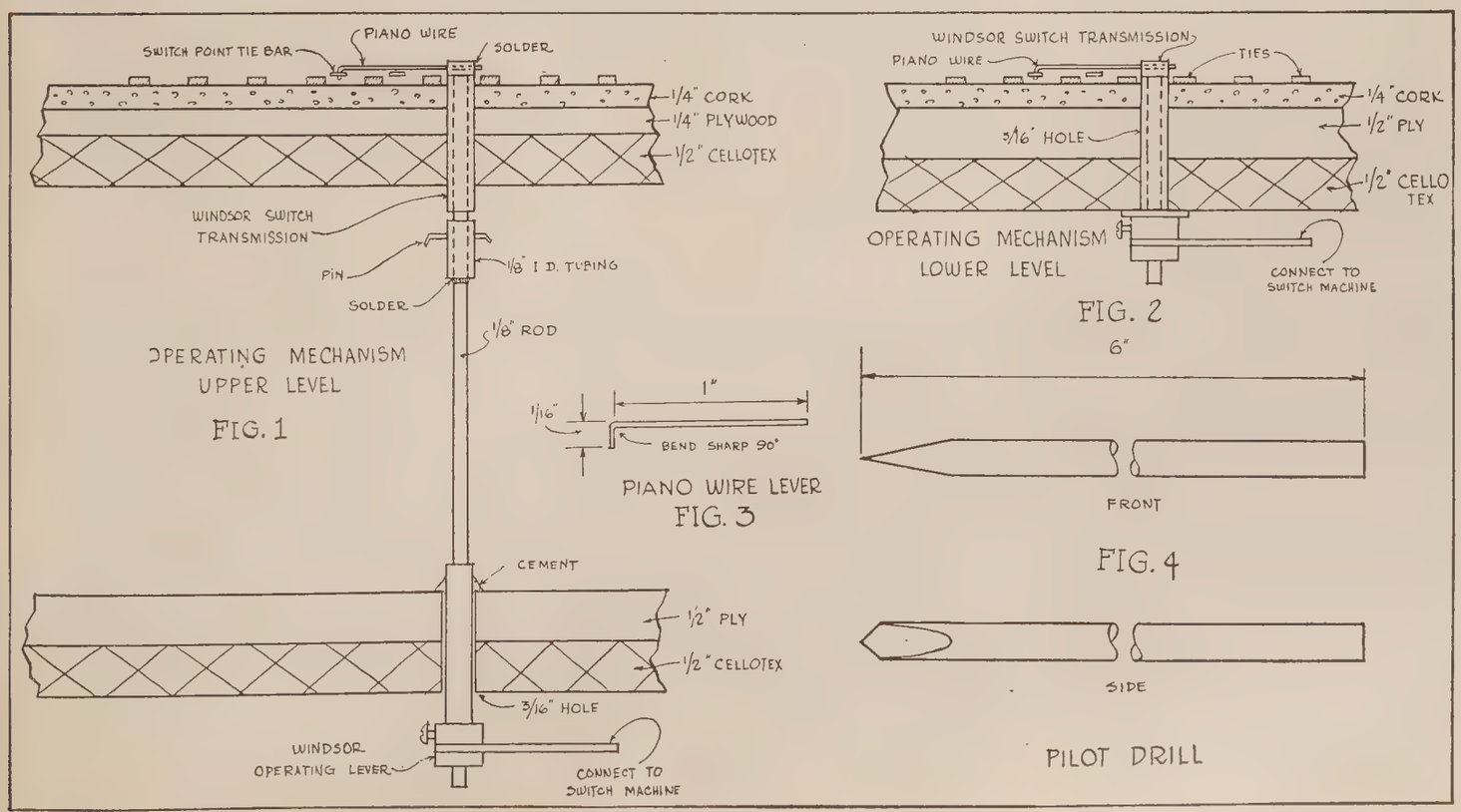
Casey was a great man long before they wrote that popular song about him. The song is a farce. It's as full of mistakes as a Tennessee hound dog is full of fleas. But it never fails to take my mind back to that terrible day long ago down at the Vaughan siding when the real Casey Jones told me to jump. •

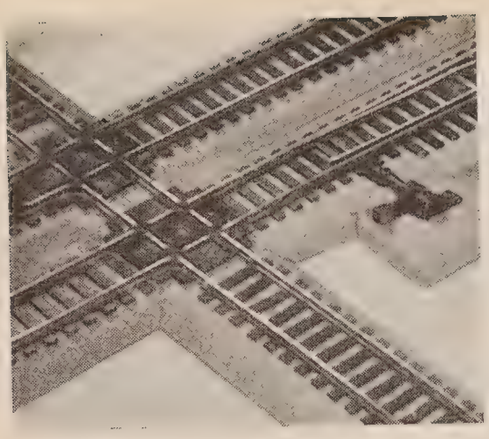
INSTALLATION OF SWITCH MACHINES

Plywood EMPIRE ROUTE

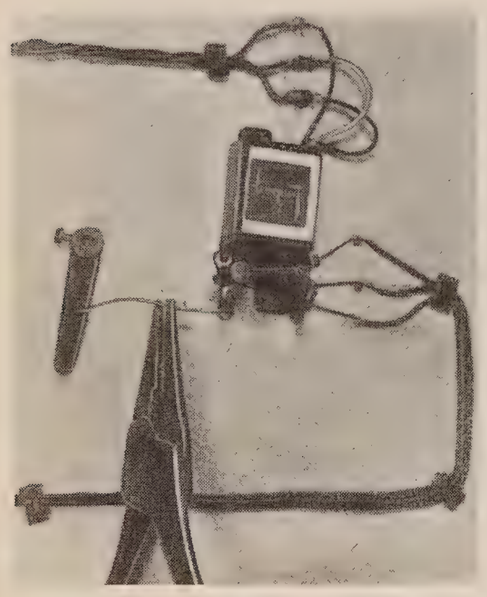
Maurice Peacock

YOU CAN heighten realism of layout by observing full-scale railroads. (Above) Spring switch on the Monon at Lowell, Indiana.

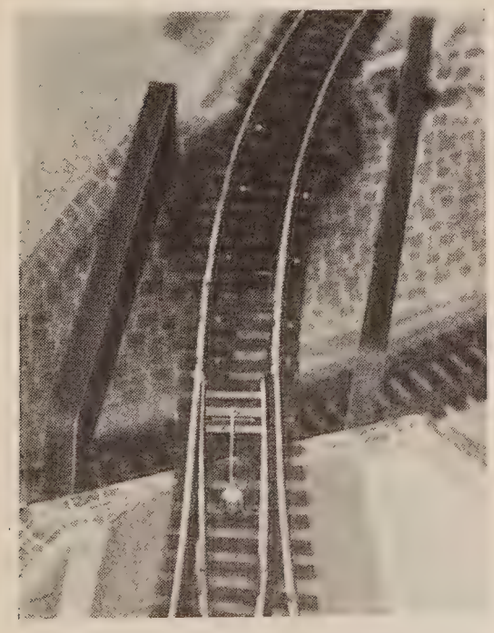




ADD a neat-looking cork base installation for your hand-thrown switches.



UPPER LEVEL SWITCH. One end of piano-wire lever is soldered into Windsor switch transmission rod, other end is bent sharply to fit into hole of the switch-point tie-bar.



LINDSEY switch machine in place. Wire links machine and Windsor operating lever.

by PAUL N. WHITE

YOU'VE BEEN HEARING a lot about armchair model railroaders, the boys who read and talk railroading but never get around to building anything. In a sense, the *Plywood Empire Route* is made-to-order for this contingent, because, while the layout will recreate the romance of turn-of-the-century railroading, operations themselves will be strictly up-to-date model practice. A future article, for instance, will deal wih the wiring and construction of a chair-side control panel for continuous running.

Last month we described in detail the building of girder bridges. There is still a timber trestle and truss bridge to come. But before the layout gets covered with too many structures, electric switch machines and manually operated switch stands should be installed. A unique method of installation has been designed for all seven machines. The reason for this is *maintenance.*

Switch machines, particularly, require adjustments from time to time, and if they are hidden away in hard-to-get-at places you'll only regret it later. Inasmuch as the space between the upper and lower levels will be eventually closed in with wire screening and plaster, we have located all machines under the lower level sub base. All you have to do is crawl under the layout, or tip it on edge, after removing the temporary structures, and work on the switches while standing up. Where, on a permanent-type layout, could you perform this difficult feat?

Our future control panel will have pilot lights for indicating switch positions. Therefore, all switch machines should be equipped with single-pole, double-throw auxiliary contacts. Pioneer and Lindsey make such machines and their products are top quality. Also, because of our control setup, these machines will be operated, not by the track-powering transformer and rectifier, but by a separate transformer. However, if you wish to eliminate the pilot lights on the control panel, you can use any switch machine which does not have the auxiliary contacts. In order to afford continuous running, only switch machines at switches 1, 3, 4, and 5 of the lower level, and switches 8, 9 and 10 of the upper level will be powered. The remainder sidings and spurs will be manually operated, so that you can enjoy the fun of actually throwing your own switches when spotting cars, working out freight movements, and so forth.

All switch installations are divided into three categories: (1) electric machines on the lower level, (2) electric machines on the upper level and (3) manually operated switches.

The first category, Fig. 2, is the basic method for both levels. We found the Windsor Switch Transmissions are ideal for transmitting the "throw" of the electric switch machines to the switches. These consist of nothing more than a bell-crank assembly, but it is carefully machined and will give years of service without any maintenance.

Installing Lower Level Switch Machines: Your first step is to drill a 3/16-inch hole through the cork ballast bed, plywood and cellotex sub base so as to receive the brass sleeve of the Windsor unit. Locate the hole three tie-spaces ahead of the switch point tie bar (the bar with a small hole), and drill the hole so that it is centrally located between the switch points when they are halfway between fully opened and fully closed. Push the sleeve of the Windsor unit down into hole.

It should be a snug fit. Be sure the top of the sleeve is flush with the top surface of the ties. Next, file the head of the Windsor operating shaft flat—this is important because it must clear the push rods of your automatic couplers on the rolling stock. A piece of piano wire is furnished with the Windsor kits.

Bend one end sharply at right angles as shown in Fig. 3. Now insert the piano wire into the hole in the head of the Windsor operating rod and drop the rod down into the brass sleeve which has already been installed. The bent end of the piano wire should drop nicely into the hole in the switch point tie bar. After you have lined this up, carefully measure the position of the piano wire in the operating head (nick it with a file); remove the assembly and snip off excess length of wire and solder it to the head. The best way to do this is to use an inexpensive blow torch, like those made by the Birk Manufacturing Company of Niantic, Conn. These are sold at dime stores. Be careful when soldering to use just enough heat to melt the solder without annealing the piano wire. Do all soldering at the rear of the head and let solder flow into hole so that it drips firmly when it hardens.

Check correct operation of the piano wire again by dropping the assembly

into the sleeve. The switch should operate freely when pushed with the fingers, and there should be no binding whatsoever. Now you can slip the operating lever, Fig. 2, onto the operating shaft. Tighten set screw and connect this lever to the switch machine with a fairly heavy (but soft) piece of brass or iron wire. Locate the switch machine 2 inches from operating rod.

Be sure to position it so that all moving parts will be free of bind and screw it down against the cellotex sub base (let screws run right into the plywood). Adjustment is accomplished by changing the effective length of the soft wire connecting link by forming kinks with a pair of pliers. Three of these are required for switches 8, 9 and 10.

Installing Upper Level Switch Machines: This installation procedure differs from that of the lower level in that a means of transmitting the power from one level to the other must be found. Fig. 1. To do this you must make an extension which in turn must fit so that there is a slight play to prevent any bind. The extension rod is made of a piece of 1/8-inch diameter brass rod or drill rod. You will also need a piece of brass tubing which will slip over the rod and act as a bearing. Be sure the outside diameter of the tubing is less than 3/16 of an inch in diameter.

Your first step is to drill two 3/16-inch holes, one in the upper level and one in the lower level. They must line up fairly accurately. This can be done by buying a very long shank 3/16-inch drill, but these are expensive. An easier way out is to make a pilot drill out of a straight section of steel coat hanger wire about 6 inches long. File a point on the end as shown in Fig. 4. Insert in a hand drill and make pilot holes through both upper and lower levels. It's best to have someone "sight" the drill for you first. Hold hand drill vertically and have them sight from one position to be sure you're holding it straight; then sight from another position at right angles from the former. When you're "lined up" carefully drill both holes. Now enlarge these holes with a 3/16-inch drill. First drill out the upper hole and then the bottom hole from below. Be sure the relation of the upper hole to the switch ties is exactly the same as that given for the lower level installation.

Cut a length of the ⅛-inch rod so that it is 3½ inches long. Also cut two lengths of the brass tubing, one ½ inch long and the other 1⅜ inches long. The short length will serve as a coupling and the longer length will be used as a sleeve, or bearing, in the lower level tabletop.

Slip the short piece of tubing over the top end of the ⅛-inch rod as shown in Fig. 1 and solder to rod. Drill a No. 63 hole through the coupling and the lower end of Windsor operating rod. Make up a piano wire and head assembly as described in the previous installation. Drop the operating head assembly into place.

Make sure the switch works satisactorily when pushed with the fingers, then bring up the extension rod from below. Connect the coupling by using an ordinary dressmaker's pin as shown in drawing. Bend each end of pin so that it won't wiggle out of place when switch is operated. The lower brass tubing sleeve will fit loosely in the 3/16-inch hole in the lower sub base, assuring perfect alignment without bind.

Fasten the lower operating lever into place and move this back and forth several times to double-check for free movement. The slight play in the hole should make this possible. Finally, cement shaft into place on the lower level using Walther's Goo or Goodyear's Pliobond cements.

Connect the operating lever to the switch machine as previously noted. Don't worry about wiring up the switch machines as yet—this will be discussed in another chapter dealing with control. Six wires will run to each switch machine, by the way, and this will be covered fully so that you cannot go wrong. Four of the Windsor units are required for switches 1, 3, 4, and 5.

Manually Operated Switches: The Plywood Empire Route features hand-thrown switches at those points that are infrequently operated. But when they are, they will be accompanied by a great deal of coupling and uncoupling which will necessitate the presence of the operator. The tendency of most model railroaders of late is to use switch machines throughout their whole system. This is fine as far it goes, but you're missing the "feel" of switching movements if you don't at least have *some* hand-operated switches.

We used the manually-operated type of switch stand made by the Model Engineering Works for the sidings. They operate beautifully and faithfully follow the prototype. These are mounted on small rectangular scraps of ¼-inch cork ballast (left over from your roadbed) and are nailed into place adjacent to the swifch points. Use your switch stand for proper placement and accurate positioning.

You will have to support some of the switch stands on the upper level with small brackets made from plywood scrap. These will be built out from the shelf with small tab pieces inserted beneath. Apply cork pieces after checking with your switch stands. When adding the scenery the wire screening will be fastened around these tabs so that everything appears as it would in prototype.

C. W. Witbeck Collection

PINT-SIZED *Ellington*, Missouri Southern 2-6-0, was built by Grant in 1889. Line later became standard gage.

Ben Cutler, Rail Photo Service.

LOCOMOTIVES OF THE

ALGOMA CENTRAL & HUDSON BAY

STEAM WAS ONCE QUEEN of the 322-mile Algoma Central & Hudson Bay Railway in Canada. Only a few years ago, old 101 (in Mike Runey's picture at right) still headed out of Sault Ste. Marie for the mines and lumber camps of the far north. She had plenty of company, a fine collection of Consolidations, Sante Fes, Mikados, and ten-wheelers. But finally steam went the way of those early plans for a terminus on Hudson Bay, and in 1952 a fleet of shiny new diesel-electrics took over, making the AC&HB the first all-diesel road in Canada. •

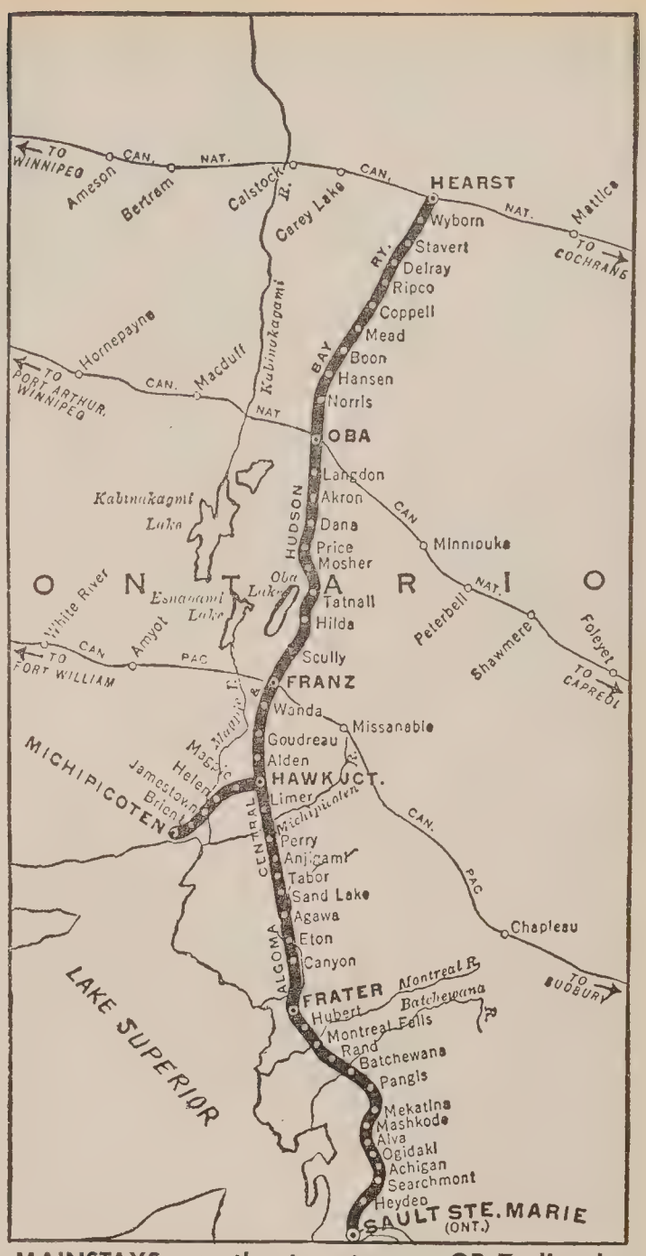
Ben Cutler, Rail Photo Service.

TRAIN TIME at Longlac (opposite) and at Hearst (above).

DIESEL-ELECTRICS

No.	Class	Horsepower	Cylinders	Weight	Tractive Effort
150	GP-7	1500	16 8½x10	245,340	62,591
151	GP-7	1500	16 8½x10	247,440	63,005
152	GP-7	1500	16 8½x10	245,100	62,758
153	GP-7	1500	16 8½x10	242,940	62,765
154	GP-7	1500	16 8½x10	249,500	62,719
155	GP-7	1500	16 8½x10	250,795	62,699
156	GP-7	1500	16 8½x10	248,955	62,239
157	GP-7	1500	16 8½x10	251,405	62,851
158	GP-7	1500	16 8½x10	251,255	62,814
159	GP-7	1500	16 8½x10	251,755	62,939
160	GP-7	1500	16 8½x10	250,895	62,724
161	GP-7	1500	16 8½x10	250,985	62,746
162	GP-7	1500	16 8½x10	251,845	62,961
163	GP-7	1500	16 8½x10	251,875	62,969
164	GP-7	1500	16 8½x10	250,985	62,746
165	GP-7	1500	16 8½x10	251,425	62,856
166	GP-7	1500	16 8½x10	252,937	63,234
167	GP-7	1500	16 8½x10	252,575	63,144
168	GP-7	1500	16 8½x10	253,785	63,446
169	GP-7	1500	16 8½x10	250,815	62,704
170	GP-7	1500	16 8½x10	251,055	62,764
140	SW-8	800	8 8½x10	230,590	57,648
141	SW-8	800	8 8½x10	229,474	57,648

All AC&HB diesel-electrics were built by General Motors in 1951 and 1952. GP-7's are Road Switchers, SW-8's are Yard Switchers. Wheel diameter for all engines is 40 inches. This roster was compiled by T. W. Cain, General Superintendent, AC&HB.



MAINSTAYS are the twenty-one GP-7 diesels.

Stanwood K. Bolton, Rail Photo Service.

FORT & MAIN
TRUNT

WHEN STREETCARS WERE YOUNG

by A. F. DAY

Those Oldtimers Had Everything—Bright Lights, Gay Draperies, and Even a Band Now and Then to Serenade Riders on Their Way

FATHER OF THE TROLLEY, Charles Van Depoele, was first man to put a wheel at the end of a trolley pole.

STREETCARS today are almost as quaint and curious to the bulk of the population as the Stanley Steamer, the opera hat, or the stereopticon. Time was when everyone rode them, for business or pleasure. But since the end of World War I, street railway systems have been folding, some quietly, some noisily, some just fading away. In Lynn, Mass., for instance, street cars were carrying a daily average of 65,000 patrons in 1931. Yet only six years later the last Lynn trolley made her solitary way to the carbarn and disconnected her power.

Lynn's history of street railways dates back to Thanksgiving Day, 1860. Abe Lincoln had just been elected President and war shadows already stretched across the land. But for one day, at any rate, Lynn forgot them. Two Canadian mustangs drew a boxcar over the windswept salt marshes between Boston and Lynn. Lynn's first streetcar experiment was a great success, and, war or no war, horsecar lines multiplied like fruit flies in the surrounding communities.

In 1875 the Naumkeag Road of Salem bought the local lines serving Lynn, Swampscott, and Marblehead. The company had 105 cars, 390 horses, and an annual payroll of $78,000.

But those first horsecars in Lynn and elsewhere were a far cry from the relatively comfortable trolleys that made their last runs at Lynn in 1937. During the winter, passengers were kept warm by straw on the floor and a fire in a stove hooked to the front of the car. An oldtimer recalled: "Stove often got the straw afire; passengers'd get out and pass pitchers of water to douse the flames. Driver Brockway once lost his eyebrows in such a fire. He earned $28 a month. The fare was five cents, collected by a woman, probably the first female who ever took fares."

Track layouts on horsecar systems resembled the early railroads. Iron rails were fastened to granite blocks not unlike those used on the famous Granite Railway. An exhibit of granite "ties" can still be seen near the high school in Lowell, Mass. Small depots for passengers' comfort were built along the route at way stations, where also the horses were watered and changed.

The nerve center of these horsecar systems was the carbarn, a huge building that housed both cars and horses as well as work rooms for the blacksmiths, glaziers, wood and metal workers, painters, and other men, representing sometimes as many as seventy trades, who were needed to keep the line running.

Of these, none was more important than the veterinarian. Systems using as few as 50 horsecars needed at least 200 horses to operate efficiently. Since most cars ran about 19½ hours a day, two shifts of horses were required. Also reserve animals, to be used in case of sickness, and dray horses for repair and work wagons.

A big problem in the carbarn was ventilation. Besides, there was an ever-present danger of fire, often caused by careless smoking in hay-filled areas. Other problems were the disposal of waste and of watering the horses. Despite these difficulties, horsecar companies prospered until 1888 when trolleys began to come in. Then the sound of hooves and the tinkle of equine bells began to fade from city streets.

Among the pioneers of electric street railways were Thomas Edison, Cyrus Field, Frank Sprague, Elihu Thomson, and Charles Van Depoele.

VAN DEPOELE has been called the "Father of the Trolley." He was the man who gave the

trolley its "witch's broomstick," the little wheel at the end of the trolley pole running against the overhead wire. It still survives even today as the most economical and efficient method of picking up current from a distant power house.

His daughter, Mathilde Van Depoele Griffin, a quick, keen little woman, now eighty, a resident of Lynn, remembers those early days. To her they are very real.

"When Edison was a young man," she recalls, "he was around our cottage in Detroit a lot. He liked my mother's beef stew. I'll never forget the first electric light my father put up outside the church—he bought the church for a song, used it for a shop—well, it was after midnight when he turned the light on. It made everything so bright the birds began to twitter—the fire department came to put out the fire!

"Later, he organized the Van Depoele Electric Light Company. He also supplied lights to the car-ferries and other boats on the Great Lakes.

"Then we moved to Chicago. I was about thirteen when he set up an experimental street railway about 500 feet long on an empty lot. He got the electric power from his shop across the street. He fixed a flat car with seats for 25 passengers, and I rode on it, along with the mayor and other dignitaries. It ran for several weeks.

"After that, Dad built an electric car line as an exhibit at the Chicago Industrial Fair in 1882. It attracted the attention of Charles Coffin, of Lynn, who was head of the Thomson-Houston Electric Co. Mr. Coffin asked my father to join them. This he did, and we moved to Lynn.

"While Dad was with the Thomson-Houston company he invented many of the essential features of the electric trolley. In 1888 he set up the first electric streetcar line which ran from City Hall Square to the Highland district. On November 19th, he drove that first streetcar up those hills.

"It was a big event. All the school children were let out, so were most of the employes of the electric companies—Edison General Electric was the other company here. Dignitaries from miles around flocked to Lynn.

"My father said he'd stop the car halfway up a hill. If the car could start up again, it would be a success. It did."

The car continued to be a success until the snow came. The car had proved it could climb the steep hills of the Highlands with ease under normal conditions, but drift-packed streets presented a different problem.

One Sunday, the Highlanders awoke to find a blizzard in progress. Up the hill on foot trudged officials of the electric company. They succeeded in getting the car out of the barn on Hollingsworth Street, but there it got stuck. Atop the car perched a half-dozen chilly workmen whose job was to keep the trolley on the wire. A great display of unscheduled "fireworks" from the trolley thrilled the youngsters.

Finally, they were able to get the car back to the barn door. Then, hitting the clear track inside the barn, it shot forward onto the turntable. The table happened to be turned the wrong way, so the car dropped into the pit. Hence, there was no transportation for the Highlands for several days.

"Snow was a minor problem," Mrs. Van Depoele Griffin went on, "but the cost of maintenance was so high that we all felt that the electric projects planned throughout the country would have to be given up.

"You see, all electric motors of that time used metal brushes which quickly wore down and short-circuited the commutator. Well, after much experimenting, my father came up with a carbon brush."

The carbon brush was one of the great inventions of that period. It did much to establish Thomson-Houston Company as a leader in the electric motor construction field.

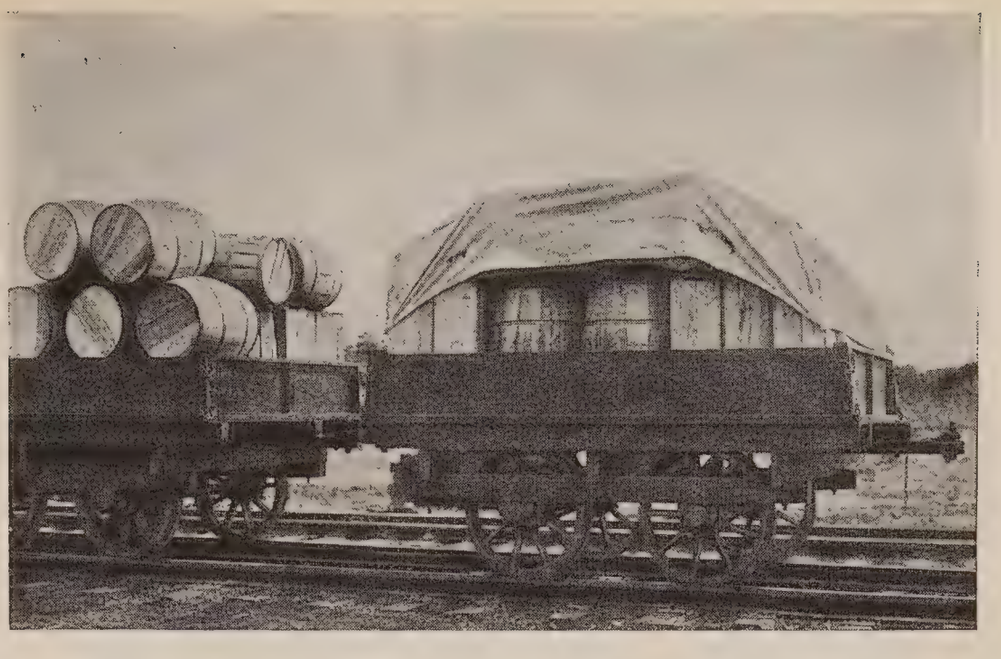
"My father," said the old lady, "continued to invent things. He was granted some 250 United States patents in various branches of electricity." She shook her head. "Four years after he drove that trial run up to the Highlands, he died of pneumonia on March 17, 1892. He was only forty-six.

"A few months later, my mother sold all his patents to General Electric."

LYNN'S FIRST electric car was this Van Depoele type shown rounding a corner in 1888. Pole was sometimes called a "witch's broomstick."

AROUND 1895, electric street railways had expanded so rapidly that people all over the country were finding their pleasure in trolley cars. Sunday excursions promoted by transit companies to amusement

Freight cars like these carried the "big" shipments in pioneer times.



Railroads have always delivered the goods

...AND THEY'RE DOING THE JOB BETTER ALL THE TIME

From earliest days the railroads have handled the big, tough jobs. As America pushed back its frontiers, the railroads were there. They moved crops to market, hauled more and more raw materials to more and more manufacturing centers, carried an ever-widening range of finished products to more and more consumers. They helped the nation grow and thrive—and, today, they furnish the low-cost, efficient, all-round transportation without which you could not live as you do.

This has been achieved by the railroads—in the best American tradition—by their own efforts and with their own money. Just since World War II, they have spent more than 9 billion dollars for new locomotives and cars, for new signals and better terminals, for all manner of improvements in plant and facilities.

It is this kind of investment—and the faith in the future from which it springs—that enables the railroads to keep abreast of their job of hauling more goods more miles than all other forms of transportation put together, and at a lower average charge than any other form of general transportation.

Spanning three modern flat cars, this 340,000-pound oil tank traveled 1,000 miles from the manufacturing plant to the refinery site.

POT-BELLIED STOVE, rattan seats, and bare light bulbs once seemed the height of luxury on car 70 of Maine's Aroostook Valley line, linking Presque Isle and Caribou. Register above door recorded fares, counted passengers.

Gerald Boothby

parks became very popular. Wherever lines operated, city folks who longed for a brief inexpensive breather away from familiar surroundings, crowded the streetcars, night and day.

The open cars, in tandem, were brightly decorated with colored lights strung like beads along the trolley, gay draperies looped at the outside ends of each row of seats, and cloth with fringes hung from the long running boards. Even a band of musicians was aboard to provide melody for the glittering caravan—all this, for anyone with a few cents in his pocket.

But by the time 1920 rolled around, streetcars were on the down grade. For in the short space of four decades, 1890-1930, the electric railway passed through a complete cycle of economic development: (1) expansion, 1890-1900; (2) consolidation, 1900-1910; (3) rising cost, 1910-1920, and (4) automobile competition, since the early twenties.

Following World War I, unemployed owners of automobiles took passengers for nickle fares. "Jitneys," they were called. As business developed, they changed their cars into home-made buses. Then they enlarged and improved them, and took great numbers of passengers from the streetcars, mainly because they could run in areas not served by streetcars. The beginning of the end for the streetcar was in sight.

Streetcar companies, failing to see the danger of this competition, did nothing to combat it. But companies began to operate over the same routes. Then, until franchises were granted, cut-throat competition often brought both buses and streetcar lines into bankruptcy—drove all forms of public transit off the streets.

But exclusive franchises were not enough to save the streetcar lines. Most cities required streetcar companies to lay and maintain the pavement around the tracks, even pave the whole street.

Thus, even in areas where street cars managed to hold their patronage, the lower cost of bus operation brought about wholesale abandonment of streetcars.

But are streetcars done for? "No," say transportation engineers. In all cities today traffic moves at a snail's pace, due mainly to the use of private automobiles. One solution, the experts say, is the use of streetcar type units carrying hundreds of passengers over private rights-of-way into and out of the cities—like the Shaker Heights system in Ohio and the Metropolitan Transit Authority in Boston.

Thus there is still some hope for the "jolly trolley" of yesteryear, the type of transportation that Charles Van Depoele did so much to develop.

SUNNY SIDE of the TRACK

Tenderfoot

A YOUNG EASTERNER took a job checking freight at the terminal of a Western railroad. He did all right until he checked a carload of household goods that included a burro. After finishing check his sheet contained following notation: "Short. One bureau." "Over. One jackass."

Shotgun Bride

B&O TRACK once ran through a shallow cut only a few feet from a small cottage in which resided a girlish bride and her much older husband. Like all railroaders the crews waved at the girl every time they passed the house. She didn't seem to mind and cheerily waved back. But her husband didn't like it. So one evening, about the time a train was due, he made her come to the edge of the cut and sit on the bank while he stationed himself a bit to one side and a little to the rear—armed with a double barrelled shotgun at full-cock, and a mean look in his eye. Not a soul waved at the young bride as the trains passed—at least, not that evening.

Dead Reckoning

A BOOMER CONDUCTOR who had just hired out was delayed on his way uptown by a lengthy funeral procession. Irked by the wait and curious about the length of the cortege, he said, to a bystander, "Who's de stiff?"

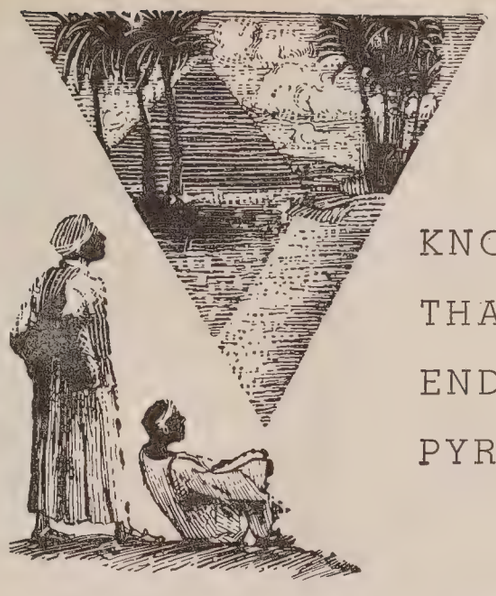
The citizen, shocked by the rudeness of the inquiry, coldly replied, "That, sir, is the funeral of one of our foremost citizens. He was an engineer on the AC&E."

"Hoghead, eh?" grunted the unimpressed boomer. "Well, dey'd better lay a rock on 'is head. 'F'e ever looks back 'n sees dat drag behin' him, he'll double inta de cemetery."

Definition

A BOOMER SWITCHMAN being asked the definition of a train crew, tersely replied. One hoghead, one bakehead, two pinheads, and one swell head.

(Continued on page 59)



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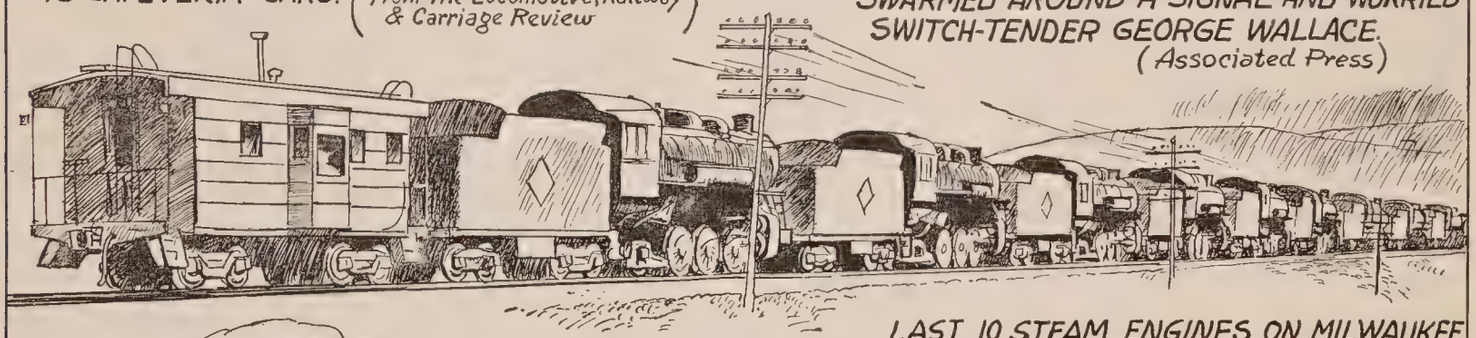
ALONG THE IRON PIKE

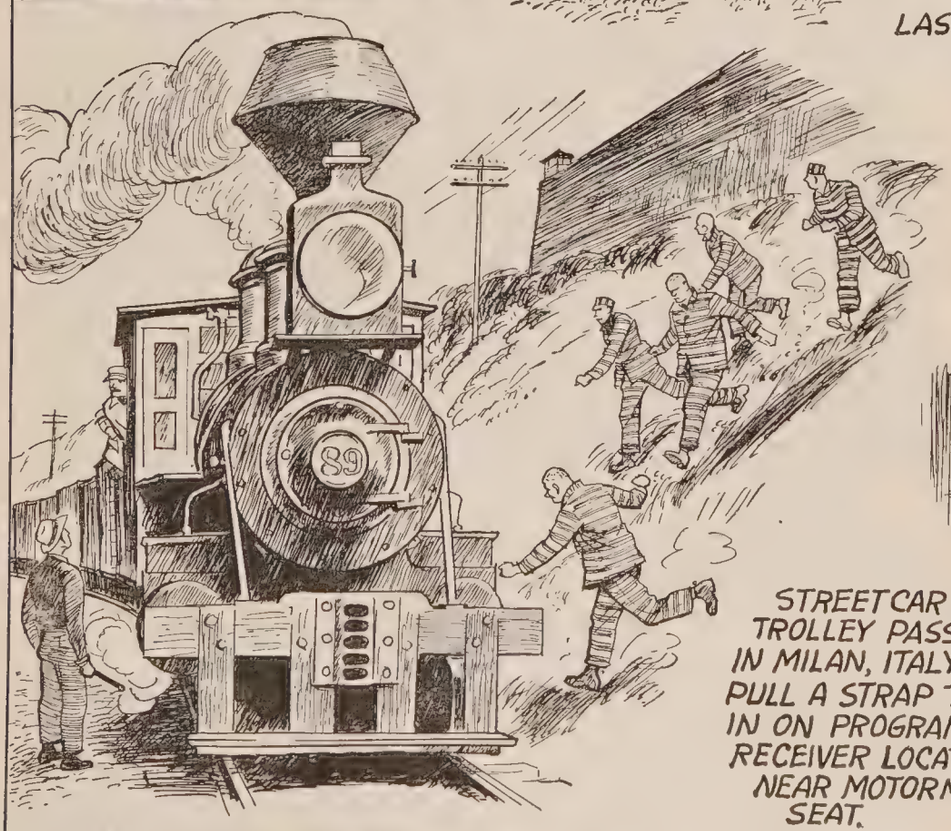
By JOE EASLEY

ALE AND POTATO CHIPS ARE VERY MUCH IN DEMAND ON THE BRITISH RAILWAYS' 49 CAFETERIA CARS. (from The Locomotive, Railway & Carriage Review)

MAKING A BEE-LINE FOR WABASH TRACKS AT DECATUR, ILL., HONEY PRODUCERS SWARMED AROUND A SIGNAL AND WORRIED SWITCH-TENDER GEORGE WALLACE. (Associated Press)



LAST 10 STEAM ENGINES ON MILWAUKEE ROAD'S IOWA DIVISION RECENTLY HEADED EAST OUT OF MARION; 7 WERE SCRAPPED; 3 ARE BEING STORED AT MILWAUKEE FOR EMERGENCY USE. (from Milwaukee Road Magazine)



5 CONVICTS FLED FROM SING SING ON FEB. 21, 1883, SEIZED NEW YORK CENTRAL ENGINE NO. 89, AN AMERICAN TYPE, AND FORCED ENGR. DAN CASSIN TO RUN HER AT TOP SPEED. TWO WERE RECAPTURED, ONE SHOT DEAD, OTHER TWO VANISHED.

STREETCAR MUSIC. TROLLEY PASSENGERS IN MILAN, ITALY, SIMPLY PULL A STRAP TO TUNE IN ON PROGRAM FROM RECEIVER LOCATED NEAR MOTORMAN'S SEAT.

Books of the Rails

TRAINS: Twentieth Anniversary Edition, by Robert S. Henry; Bobbs-Merrill Co., Inc., Indianapolis; 136 pages, illustrated; $3.

A SEMI-CLASSIC in its field, *Trains,* in this its latest edition, still bears up remarkably well after 20 years, despite competition. The historical sections are routine stuff, but the discussions of the mechanical side of railroading are among the clearest and most interesting you're likely to want. The new *Trains* catches up on railroad developments since the last edition appeared—push-button yards. dieselization, innovations in track, operational equipment, engine design, and servicing, to note a few.

EMETT'S DOMAIN: Trains, Trams & Englishmen: The Best of Rowland Emett. Harcourt, Brace & Co., New York. 159 pages. $3.50.

YOU HAVE to see Emett's railroad and trolley cartoons to enjoy them. One involves a startled earthbound policeman and a trolley car gliding through mid air atop its trolley wires toward the Pixie Wood terminus. The cop shouts up to the motorman, who is shifting the trolley pole out of the way as if nothing at all extraordinary were taking place: "Midsummer night or no midsummer night, I shall 'ave to report it." The sketch loses half its point and most of its charm in the telling. You miss the look of outraged propriety on the policeman's face, the perplexity of the motorman, and above all the tram itself, floating in mid-air.

Bizarre, hilarious, witty, Emett's drawings embody a gentle criticism of our mechanized society.

FIFTY MILLION ACRES: Conflicts over Kansas Land Policy, 1854-1890; by Paul W. Gates; Cornell University Press, Ithaca, N. Y.; 311 pages, $4.50.

IN THE LAST HALF of the 19th century, Kansas was racked by more internal strife than any other Western state, and the cause was land, as Mr. Gates demonstrates in this solid, scholarly but not spritely volume. Most of the trouble arose over the disposal of Indian lands, land grants to railroads, and the sales, settlement, and tax policies of these railroads.

Western hostility to the railroad during the period, it appears, was due more to questions of land ownership and sale than to freight or passenger rates. The railroads had the upper hand and they made the most of it. *Fifty Million Acres* sets the record straight.

HIGH IRON, by Todhunter Ballard; Popular Library, New York; 160 pages; paper bound, 25c.

A THIRD-RATE railroad novel about a silk train, *High Iron* is not even a second-rate Western.

THE GOLDEN BOOK OF TRAINS, by Jane Werner; Simon & Schuster, New York; 88 pages, 50c, paperbound.

A COOK'S TOUR, for kids, of all phases of railroading from rolling stock to lingo, the book winds up with a fable about a man who builds his son a model railroad. It was prepared with the cooperation of the Lionel Corporation. In spite of its needlessly childish style, the book is rich with the lure of railroading. There are many illustrations, some of them in comic-strip color.

THE STOLEN TRAIN: A Story of the Andrews Raiders, by Robert P. Ashley. John C. Winston Co., Philadelphia; 182 pages, $1.50, illustrated.

IN ITS LATEST RETELLING, the story of this raid has lost none of its force. The great adventure is seen through the eyes of 15-year-old Johnny Adams, the only fictional character in the book, who comes along on the raid because he's good at shinnying up telegraph poles. The bold attempt at sabotage and the suspense of the locomotive chase are as impressive as ever, but Major Ashley's idea of having Johnny meet President Lincoln at the end is almost an anti-climax. Though it's designed for adolescents, I don't suppose you have to be one to enjoy this exciting tale.

HOW YOUNG GOT THE VOTES. Fortune, August 1954. Time, Inc., 9 Rockefeller Plaza, New York 20. Single copies, $1.25.

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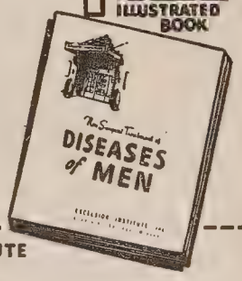

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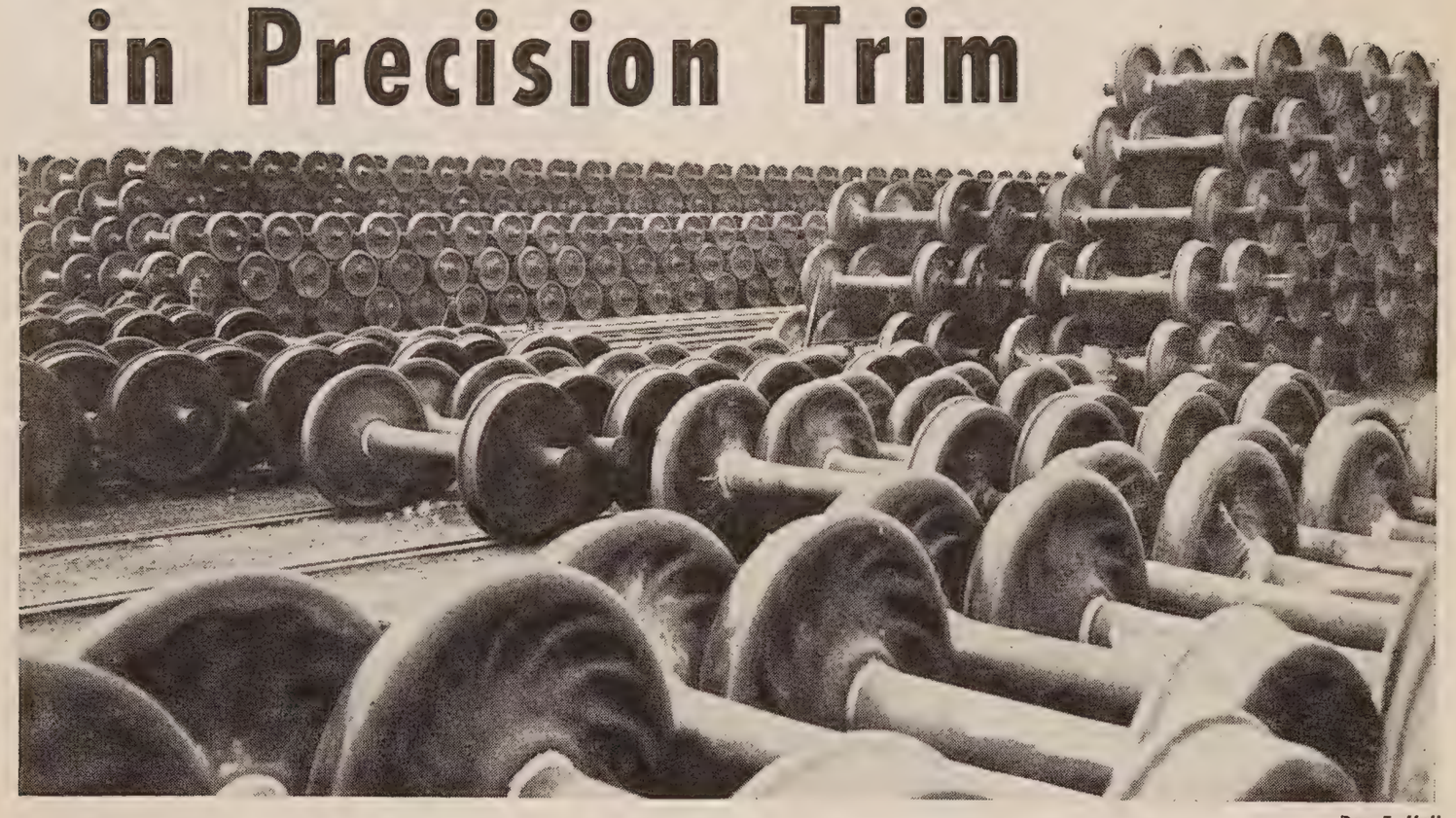

Don E. Hall

STOCKPILE. Wrought-steel wheels with as many lives as a cat await assemblage on trucks.

by TED WALLACE

Oldtimers Said, "You Can't Turn Wheels Without Removing Them from the Truck," until One Day the Impossible Happened

THROUGH thousands of years of history, the human animal has eased his labor with one of the most simple and efficient of inventions—the wheel. But not until the late sixteenth century were wheels first brought into conjunction with track, and the mechanical age began.

Early railroad wheels were made of wood with iron fittings and rims. Axles were usually iron. But as the years went by, cast iron, wrought iron, and finally wrought steel replaced less durable materials. By 1906 the locomotive wheel had taken on the form and substance it has today. Yet the end of its development is not in sight.

The popularity of the diesel-electric is due not so much to its efficiency and low cost of operation as to its high availability. It is not unusual for four modern growlers to replace as many as seven steam locomotives. The flexible road switcher equipped with a steam generator may begin a trip hauling a passenger train, shift to a trick in the yard on arrival, and wind up again at the home terminal pulling drag freight.

Such flexibility was not possible with steam, for few dual-service engines were designed. The yard goat without an engine truck had to remain in switching service where the speed rarely exceeded a dozen miles an hour.

When diesels first came into widespread use, dispatchers often kept units working as long as twenty-two hours a day for months at a time. But as the miles began to pile up, the growlers' wheels were among the first parts to begin showing wear. Because the turning or replacement of wheels is a shop job involving interrupted time schedules, it appeared that a great many more diesels would have to be ordered to keep the trains rolling.

Companies considered ordering spare trucks so that changes could be made in a matter of hours. This would have meant heavy investments in motors and large castings, and the wheels would still have to be taken to the shop for turning in the lathe. With a diesel unit costing about three times as much per horsepower as a steam locomotive, diesel availability suddenly seemed to have been much over-estimated. There was a lot of head scratching at conferences.

While this was going on, a sort of miracle was in the making. The Standard Railway Equipment Company started experimenting with a machine for turning wheels "on the hoof."

One of the cheapest wheels on the market is made of chilled cast iron. Used on thousands of cars, they have but one life and when worn must be scrapped. Something tougher and with more than one life is needed for the driving wheels of a diesel, so a wrought-steel wheel, whose treads can be restored several times before they are completely worn out, was adopted.

Wheels, like automobile tires, are expensive, and officials want to wear them to the limit. The limit varies. No manufacturer can make any specific guarantee of their life, for on some roads, where curves are sharp and roadbeds poorly ballasted, wheels wear out after only 25,000 miles. This, of course, is the extreme case. Generally, it's a quarter-million miles.

A usable wheel has to meet numerous specifications, but the most important ones are those determining its contour. Flanges must be carefully machined with the proper radii—they can never be under one inch in height as an insurance against derailments. The tread must be cone-shaped with a taper of one inch in twenty.

You may wonder why the tread is tapered rather than flat and wide. There are two big reasons. On tangent track the cone causes the wheels to center themselves so that the flanges, which wear very rapidly, are not continually rubbing against the inside edge of the rails. Then, in rounding curves, the taper helps lessen the slipping or sliding action.

Though degrees of curvature differ greatly and a perfect turning of both wheels on the same axle is impossible, the taper, for practical purposes, eliminates these variables.

When the wheel treads are coned, the circumferences also vary, the larger coming at the flange and the smaller at the outer rims. The outer rail of a curve is much longer than the inner one, so naturally a wheel

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of larger diameter is demanded. If both wheels on the same axle had the same size, one of the wheels would have to slip to turn a curve.

As wheels are now shaped, centrifugal force throws the weight of the locomotive outward so that the throat of the flange on the outer wheel bears heavily against this outer rail while the inner wheel drops to a smaller diameter. To aid this further, tracks on curves are usually broadened beyond the standard width.

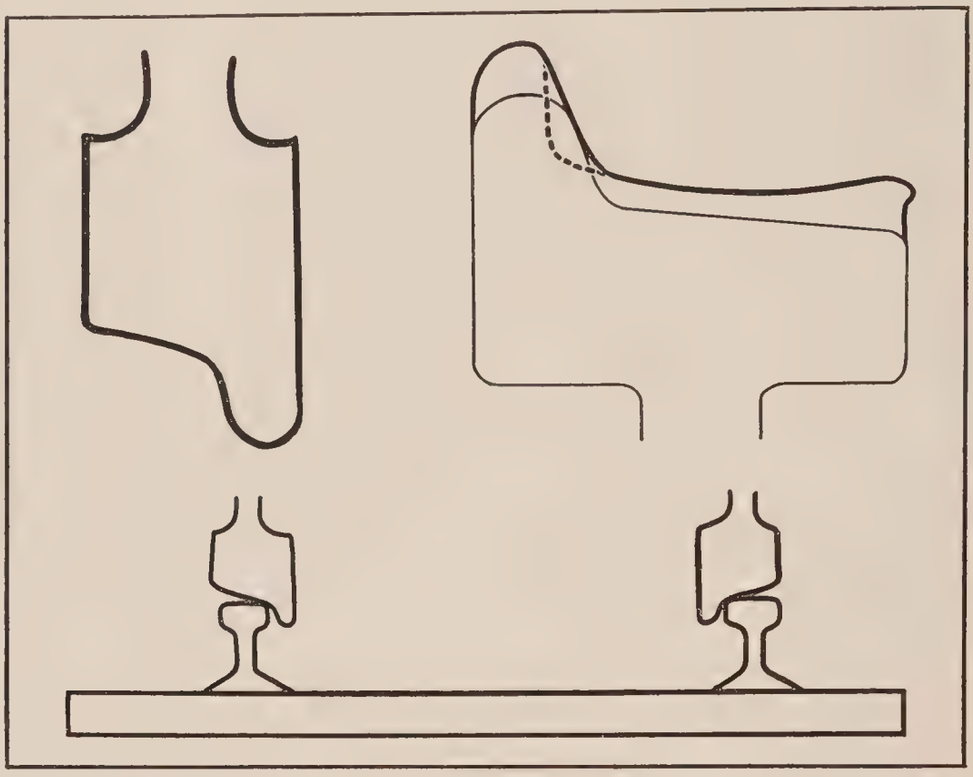
Even with care in machining contours, the diesel wheel wears very fast. Size must be taken into account, for the 40-inch diesel wheel makes approximately twice as many revolutions per mile as the huge steam driver.

Probably the biggest cause of excessive wear is the growler's low center of gravity, the point where the body revolves in perfect balance. In a wheel it is located at the center of the hub, but it can also be determined in irregular-shaped objects such as a locomotive.

The New York Central's Class J steam locomotives had a center of gravity about 88 inches from the top of the rails, whereas the road diesel's is about 55 inches. When the center of gravity is low, great speeds can be reached on curves without fear of overturning, but the weight of the locomotive now tends to concentrate against the rails, and they have a tendency to spread. In anchoring them securely, the strain is thrown on the flanges, and they wear very rapidly.

A new wheel has the throat of the flange well rounded with a thickness of 1½ inches. Wearing to 15/16 of an inch is considered dangerous. As the rim is 2½ inches thick, the flange can be restored to its original shape by turning off some of the metal. This wearing and contour-restoring process can be repeated until the rim is reduced to one inch in thickness after which the wheel is scrapped as no longer safe for operation.

But restoring a wheel is a big job—or was. In the days of steam, rods and driving boxes had to be removed—a time-consuming operation in itself—before the wheels could be sent to the shops. When diesels came in, things were not much easier, for motors are clumsy and gear casing difficult to handle. Then the Standard Railway Equipment Company came up with its machine that does the trick on the hoof with hardly any preparation.



NEW WHEEL (top left) has tapered contour of one inch in twenty. Worn wheel (top right) must be machined to new contour when flange is 1½ inches high. When flange wears to point indicated by dotted line, a lot of metal is wasted restoring shape. Wheel is scrapped when rim wears to one inch thickness. (Above) Cone-shaped wheels center themselves on rails without friction on flanges.

These wheel-truing machines are installed at central points where power can be dispatched while the diesel is in revenue service. Wheels of an entire unit can then be turned in about five hours and returned to service without the "breaking in" period of steam locomotives.

The secret of the operation is a simple one. The growler's oilbox covers are removed, exposing the ends of the axles. Then the centers, drilled into the ends of the axles when they were originally turned out of the rough billet in heavy-duty lathes, are used by the wheel-truing machine.

All operations are automatic, being initiated by press-buttons which start small electric motors and hydraulic rams. Castings are heavy and set on a concrete foundation in a box-shaped pit. The unit is run onto the machine under its own power and placed so that the centers can be inserted into the axles just as in a lathe. A section of the rail is then slid out of place, leaving the wheel to be turned suspended in air. Next a small drive wheel is raised at the point of rail contact. Slightly ahead of this is a revolving cutter which chews off the metal as if it were putty.

The cutter is the heart of the machine and must be shaped to the exact contour of tread and flange. It is composed of an arbor into which is set over two hundred small buttons or tool tips of hard carbide steel. These are capable of ripping off a ¼-inch chip with little effort.

The machine has proven of especially great value when, during emergency applications of the brake, slide flat spots develop. With the advent of this device, the conditioning of wheels has been held to a low cost.

SUNNY SIDE OF THE TRACK

(Continued from page 53)

Tight Fix

A SWITCH ENGINE coupled to a dozen assorted cars was standing in the lead with the switch crew on the "spot." The foreman leaned against a switch stand, while his pin puller loafed in the shade a couple of cars away.

Suddenly the foreman saw the trainmaster approaching from the yard office. Like a man stung by a bee, the foreman jumped alert and gave a violent "kick" sign to his pin puller and the engineer.

"How many?" yelled the pin puller.

"Any many!" replied the foreman. "Got to make that trainmaster think we're workin'."

High Society

A YOUNG BRAKEMAN on a small lumber railroad in the South after hearing tall tales told by wandering boomers decided that he would get some of that experience for himself. He quit. A few months later he returned and wanted his old job back.

His former partner was curious and asked, "Where'd you go, Hank?"

"Ovah on that Central o' Gawgia."

"Didn't ya lak it there?"

"Naw. Tew high-falutin' fer me."

"Whadda ya mean, high-falutin'?"

"Why, d'ya know," said Hank earnestly, "they're so dog-goned high-toned on that there Central o' Gawgia they make th' passenger conductors wear shoes."

Family Matter

IN YEARS OF YORE, the Nashville, Chattanooga & St. Louis was known as "Grandpa's Road" because the conductors hired their brakemen and engineers hired their fireman. The result was that brothers and nephews fired or braked for uncles or fathers or some other relatives. Railroading became a family matter. Once a freight crew was doing some station switching on the fireman's side of the train, when one brakeman suddenly rushed up to his partner and called out, "Brother Harry, run over to the engine and tell cousin Paul to have uncle John slack ahead, Grandpa's got his whiskers caught between two couplers."

Bad Actor

THE YARDMASTER was standing in front of the yard office when a guy sauntered up and inquired, "You de ringmaster?"

"I'm the yardmaster," he replied.

"Well, I'm a new actor dey sent to perform. Whadda ya want me to do, herd de cages or folla de calliope?"

"Neither," answered the yardlets. "Just take a seat on that flat car and watch the parade go past."

Fixed Signals

In the good old days when brakemen carried lanterns instead of flashlights and railroad atmosphere was full of cinders, a trainmaster, with a sense of humor, hired the kid brother of a young conductor and sent him out to learn the road.

In due time, the student came in to take his examination. After he had filled out his book, the T.M. retired with him to the *sanctum sanctorum* to ask some oral questions. Quickly discerning that the youth had all the rulebook answers, he asked, "What is a fixed signal?"

"Fixed signal," the youth began, "is a signal always displayed from the same position such as switchlights and—"

"Aw, hell!" the official interrupted. "You don't know the answer to that one. Bill," turning to the elder brother who had just appeared on the scene, "tell this kid what a fixed signal is."

"A fixed signal," the conductor said with a smirk, "is a *student brakeman* standing on the head car with his lamp out and a cinder in his eye."

ON NEXT MONTH'S WAYBILL

"Pennsy Power Parade," by Walter A. Lucas, history of PRR locomotives—with roster, many good photos . . . Peter Josserand tells of dispatching during a "Sierra Storm" . . . a great picture collection: "Stations Old and New" . . . a new Gil Lathrop narrow-gage story . . . other headliners . . . departments . . .

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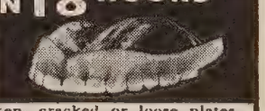

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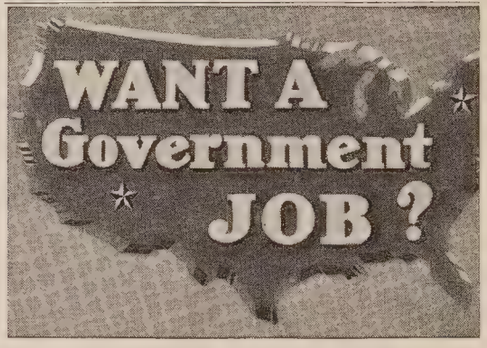

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TRANSIT TOPICS

by STEVE MAGUIRE

Steve

AFTER nearly two years' absence your former *Electric Lines* editor is back at the controls again with late news and comment. As long as there remains one electric railway line to be saved, we will keep in the fight to preserve it. We who know the value and benefits of the streetcars and interurbans which are still surviving can do much toward blocking the short-sighted interests that would substitute smelly buses for clean fast electric cars.

Anyone who's ever ridden in a bus knows that this form of transportation is too jerky and too crowded even to permit you to read a newspaper while in transit.

* * *

THOSE of you who live in or near New York City won't want to miss a *free* illustrated lecture to be given October 15 at 8 P.M. in Penn Station's YMCA auditorium, on the subject, "Little Known, Abandoned, and Unused Tunnels of the IRT division of New York's Subway-Elevated System." Speakers will be George Horn, a Subway motorman, 605 E. 57th St., Brooklyn 18, N. Y., and Martin Schachne, Administrative Department, New York Transit Authority, who will show maps. They'll also give information on the mysterious old LIRR tunnel at Atlantic Avenue, Brooklyn, sealed up since 1861.

* * *

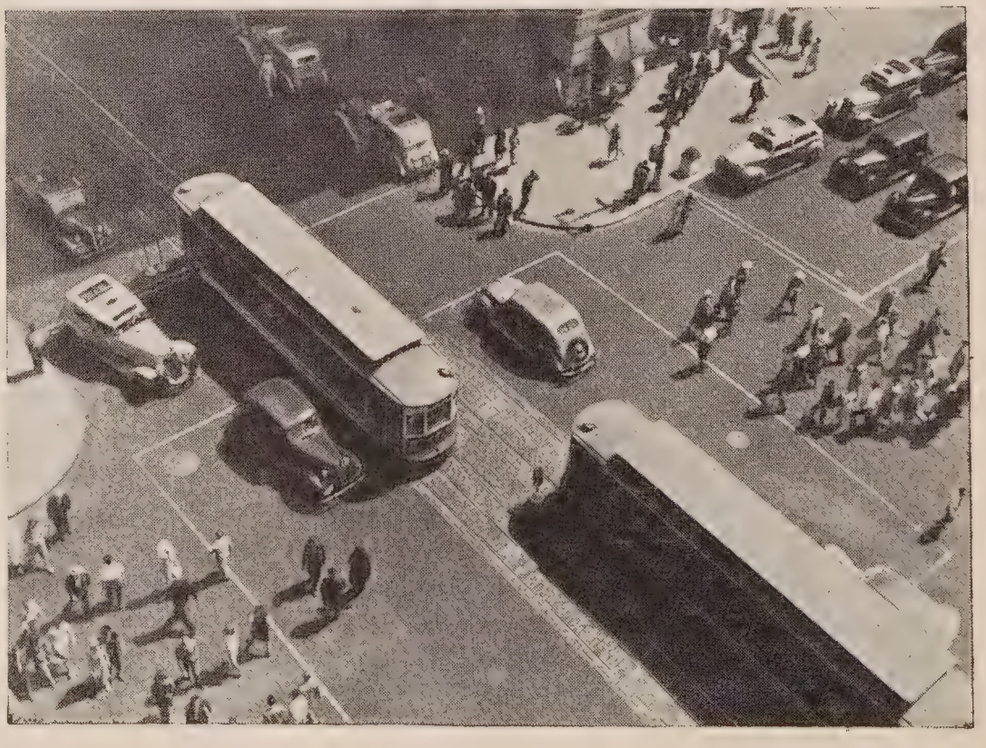
TURN now to Los Angeles, once headquarters of the world's largest interurban line, the Pacific Electric. Currently known as the Metropolitan Coach Co., the former PE lines are under the control of Jesse Haugh, an anti-streetcar official, who has been given permission to abandon the Subway-Hollywood Boulevard route to buses. At the same time, however, he was turned down flat on his proposal to abandon the Subway-Glendale-Burbank line. No decision has come from the state Public Utilities Commission as yet. However, the Los Angeles PUC declared, in its decision against displacing trolleys, that buses on the streets are the "chief cause of people driving and congesting the streets," and that the best answer is to be found in utilizing present semi-rapid transit facilities (the subway) and existing private rights-of-way.

According to Kenneth Harrison, 5871 S. Hoover St., Los Angeles, on the basis of this tardy recommendation, it now appears tragic that the Los Angeles Commission didn't consider their present position long ago when they approved the abandonment of such heavily-traveled semi-rapid transit lines as the Pasadena Short Line, the Monrovia-Glendoram Baldwin Park-Covina, and the Venice Short Line.

Admittedly, the cause of the L. A. smog is the concentration of monoxide gas from autos and buses, yet Jesse Haugh clings to the idea of converting all the PE routes to buses. Latest in the steady plan of execution are the lines operating out of the Sixth and Main terminal, including the Watts local cars, the Long Beach and San Pedro interurbans and the Bellflower trains. He hopes to make the Sixth and Main interurban depot their principal *interurban* bus depot.

Regarding the possible victory of the public over the Haugh management as regards the Glendale-Burbank decision, it may still be a hollow one if Mr. Haugh is given final permission to abandon the Hollywood Boulevard line. These two lines are the only ones left using the Subway terminal. They alone could not pay the cost of operating the Subway. One certainly couldn't.

And if the famous Hollywood Boule-



A. F. Sozio

BUSY CORNER, 42nd Street at 5th Avenue, New York, as it looked November 17, 1946, the last full day of trolley operation.

vard line goes, the PE or Mr. Haugh will still have to maintain the trackage so that the Glendale-Burbank cars can get to the only remaining car-house and car-shops in the western district, those in the West Hollywood, for necessary repairs. And the added expense would only be another reason for future applications for abandonment.

As concerns the 5050 series of cars out of the West Hollywood car-house, our informant says they are now the dirtiest cars he has even seen in service. Is this, perchance, due to the policy of the new operators of the former Pacific Electric equipment?

Another informant, Jimmie Walker, Jr., 3564 Josephine St., Lynwood, Calif., sends us a recent copy of *Metro-Lines,* the MCL's monthly publication, carrying a story entitled "Rapid Transit Is Here." You might gather from this piece, if you didn't know better, that the bus people had invented rapid transit.

The MCL, it becomes clear, hopes to run buses on all the freeways built by the public. The article naively asks, "Why spend additional millions of dollars seeking other means of rapid transit when it is available on freeways for which financing has already been arranged?"

* * *

WELSH RAIL-BIT. F. F. Clough of *Kingswood,* Pen-Y-Bryn Road, Upper Colwyn Bay, Wales, informs us that the Llandudno & Colwyn Bay Electric Railway is still operating. An interurban tramway, it runs both single-deck and open-top double-deck cars. Some of the single-deck cars are originals, built nearly forty years ago by Westinghouse. The cars have no air brakes, only manual and emergency track brakes. The line is about six miles long, part of it passing over a private right-of-way, running on 3-foot 6-inch gage track.

* * *

BALTIMORE TRANSIT CO. has just presented to the Maryland Historical Society eight historic old streetcars that were in service at the turn of the century, reports Paul F. Myers, 3215 Milord Ave., Baltimore 7, Md. Three of these cars—one of them an open-bench summer type that used to operate to Riverview Park—were placed on display. Oldest of the lot, No. 4732, is a small four-wheeler, with five windows, seating only 20 passengers. It was built about 1880 as a horsecar, rebuilt later as a cable car, and finally electrified.

MANY last trips over trolley routes are well advertised in advance and bring out crowds of fans and onlookers. Edward E. Wood, Jr., 68 Needham St., Dedham, Mass., an old Boston Elevated operator now with the MTA successor, tells of his last run through the Arlington Street entrance to the Boston Subway on February 16, 1941.

This Subway, on Huntington Avenue, ran between Opera Place and Copley station. On the last night of surface operation, before the Arlington Street surface line was submerged, track crews worked to cut the existing rail at the subway entrance. They cleared the trestle work from the portal and joined the Subway rail to the surface track from Opera Place west (outbound), which was to continue in use for surface operation.

Ed writes: "A few cars had been spotted on the line to be abandoned during the dedicatory exercises. One by one, they were sent out, via the old route, to return by Subway, until only my car was left. Starter Si Hadley, now retired, told me then that my car would be the last to make the complete run on the old trackage, and it was."

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Perfect Satisfaction in Every Way

"I am happy to report that the Appliance that I received from you more than a year ago has given perfect satisfaction in every way.

"In fact, I am not sure I will ever need another one, but I am asking you to send me the best grade as marked on the order blank, then if I should ever need it I would have it. I think I would want to use it when I go for long walks or work at heavy work of any kind, just for protection."—H. M. Herron, Mouthcard, Ky.

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READY FOR THE RUN to West Albany, New York, in the early 1900's, this Union Traction car paused on the busy Clinton Avenue trip. UTC cars were equipped with metal fenders and steel ice scrapers.

A COMPREHENSIVE and well-illustrated story of Iowa's interurban lines is contained in the May '54 issue of *The Palimpsest,* put out by the State Historical Society at Iowa City. The entire issue, 35 pages, is devoted to this subject, authored by historian Frank P. Donovan, Jr., who occasionally writes for *Railroad Magazine.*

Another readable traction publication is the story of the *Laconia Street Railway* of New Hampshire. The author, Harold H. Young, 3 Northway, Bronxville, N. Y., an investment banker, became fascinated with trolleys in his home town of Laconia.

His introduction states: "There still remains enough of the small boy in me to make me want to write a little history of this enterprise." The "little history" is a 30-page manuscript with some good pictures. One picture shows single-truck snowplow No. 1, originally called the *Terror* but later renamed the *Blizzard.*

Mr. Young tells us that while streetcar service in Laconia quit officially August 9, 1925, trolleys did appear in service on the streets occasionally after that date when buses broke down. We don't know if we ever heard of such a thing anywhere else. Did you?

IN LOS ANGELES newspapers the other day, a General Electric representative told the American Institute of Electrical Engineers that the solution to congested streets was the high-speed transit using the center strip of express auto highways for railcars capable of a passenger-carrying capacity equal to seven eight-lane highways jammed with cars.

Downtown Los Angeles long ago reached the saturation point for autos and buses and the smog involved, yet most of the local merchants, it would seem, want to give up the last remnants of clean, comfortable transportation. This move would be good for their competitors, the suburban shopping centers, but assuredly it would not be good for the L.A. merchants or the public in general.

* * *

CORRECTING a recent statement in this magazine to the effect that no electric trolley should be called a *cable car,* Harold L. Call, 354 Pine Street, San Francisco, writes that a segment of the Fillmore Street trolley line in his city was a combination of trolley and cable line for a distance of two or three very steep blocks north of Pacific Street.

At the top, the trolley would hook onto a cable in a slot in the center of the rails. But before descending, another car at the bottom of the hill hooked onto the same cable loop, and in a counter-balanced manner, the cars proceeded. At the end of the short cable run, the connections with the cars were unhooked and they went their own ways under trolley power.

At night, the last car out was a dummy, or work car, which remained in place at the inclined portion ready to come up next morning as the first car descended the steep grade.

A similar cable setup was used in Seattle, Wash., on the Queen Anne route. This line, along with the Fillmore Street route, gave way to buses years ago.

* * *

EXTENSION of New York's 14th Street Subway across the Hudson River via a tunnel to New Jersey is proposed by the Regional Plan Association of New York as a means of solving the traffic problem in the big town. The plan calls for under-river rail tubes costing $40,000,000, as compared with automobile vehicular tunnels which would cost $100,000,000.

GREAT LAKES

(Continued from page 21)

Milwaukee, using boats named for each of those two ports. In 1935 the GT shifted its Michigan base of operations from Grand Haven to Muskegon and undertook joint ferry service with the Pennsylvania Railroad. Each of the GT's three carferries transports between 55,000 and 65,000 standard railroad freight cars across Lake Michigan each year.

Their skippers perform a real feat, winter and summer, in daylight and darkness. "Jamie" of the *Milwaukee Sentinel* puts it this way:

"They make a right-angle turn when leaving the Milwaukee slip and then eggshell their way between the Chicago & North Western bridge piers at the mouth of the Kinnickinnic River. Grand Trunk vessels have a beam (width) of 60 feet, leaving a bare foot-and-a-half margin on either side. Not much sea room! Should any part of the 360-foot vessel get out of line, her 2492 tons would make kindling of the fender pilings."

Speaking of pilings recalls "Carferry Carrie," the female mallard duck that built her nest in a rotted hole atop a piling on the Grand Trunk's Milwaukee docks. Finding such a nest gives the marine railroaders as much of a kick as the discovery of a nesting robin in a caboose, for example, gives to land railroaders. Anyhow, the GT men posted a 24-hour watch at the wharf to protect the nest and issued strict orders that no boilers were to be "blown down" in the slip while the eggs were being hatched.

ON LAKE ERIE, many years ago, carferries starting out on a one-day trip in winter took with them a stock of provisions sufficient for at least three weeks. That was to care for an emergency, in case they got frozen in, en route. Plenty of times the wind would pile up the ice mountain-high in the ferries' path, and in some cases they had to dynamite.

The carferry *Ashtabula,* which went into service on Lake Erie in 1906, was noted for her "winter bottom," which was so designed that she could free herself from the ice in several different ways. She had eight transverse bulkheads, the water in the compartments being controlled by ballast pumps. By filling up the tanks aft and pumping out the ones forward at the same time, the ferry's bow was made to climb up on a field of ice and crush it down.

To plow directly into an ice field, when traveling light, the *Ashtabula* was lowered to the desired depth by filling all her water compartments. Or, in freeing herself from ice, it was sometimes deemed best to list the vessel to one side. This was done by filling the tanks on one side of her and pumping out those on the other side.

For the past few years, Lake Michigan trainferries have main-

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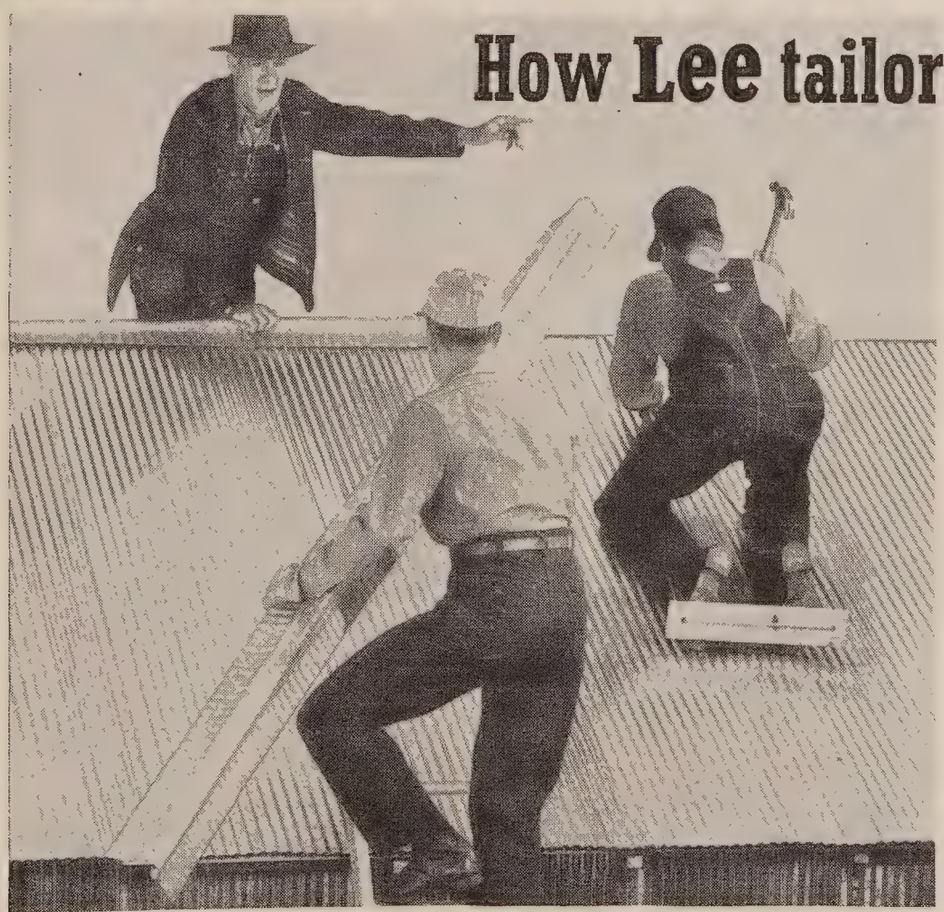

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Top and right: Lee Overalls and blanket-lined or unlined Lee Jackets fit right for comfort, freedom of action. "Extras" include: "No twist" shoulder straps, save-loss pockets, stamped hardware, comfortable "U" shaped crotch. Below: Lee Dungarees, bar tacked at points of strain, many other features.

Lee

CLOTHES FOR WORK AND PLAY

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BACK IN THE DAYS **Harry C. Temple**

"Yeah, Pop, we're takin' out all the telegraph instruments."

tained the only all-year-round navigation on open waters of the Great Lakes. The frequent arrival and departure of boats within the harbors rarely permit the formation of surface ice more than four or five inches thick, even in coldest weather, and the staunch ferries break it up and move around almost as easily as when navigating in clear water.

Lake Michigan seldom freezes beyond a distance of a mile from shore. There have been exceptions, of course. Oldtimers remember the winters of 1917-'18 and 1933-'34 when the northern end of the lake froze completely from shore to shore.

Years ago a retired skipper, Frank Dority, recalled that he had piloted the *Ann Arbor 2* on her maiden voyage from Toledo to Frankfort in January, 1893.

"We battled through the thirty-mile icebound straits," he said. "In those days we had no icebreakers nor tugs to help us. The ice was ten to fourteen inches thick and windrowed badly. It was blue, solid and tough and in some places it piled up about 20 feet, but we got through."

On a February day in '36 the mercury dropped well below zero and stayed there for two weeks. During that period the Ann Arbor ferry routes were frozen over, while the Milwaukee-Ludington route of the Pere Marquette (now C&O) had but a mile of open water, and blizzards occurred almost daily.

The railroads worked desperately to clear their tracks of high drifts, only to have them filled in a few hours later. Newspapers daily published praise for the almost on-time carferry schedules, comparing them with the trains on land, which were running from 12 to 24 hours late.

Between the Sturgeon Bay Canal and Menominee, Mich., a distance of 22 miles, ice forms with the first cold snap, but the Ann Arbor have been operating this route on a year-round basis since 1928. Prior to that time, service was discontinued from early January till about mid-March. In those days, when the route was reopened, solid blue ice a yard thick had to be broken down—and if you think that was easy, just try it some time!

The *Ann Arbor 5* is used almost exclusively in Menominee winter service because of her sharp slant from bow to midship that enables her to break the ice by climbing onto it more readily than other AA boats.

The Green Bay ice, which forms in windrows, is most troublesome. Each year, when the *Ann Arbor 5,* pushed by another trainferry, cuts through the ice at four miles per hour, thousands of motorists park nearby to watch the dramatic operation. One fisherman left his automobile directly in the path of the two boats. He was not in sight. The skipper of the *Ann Arbor 5* stopped both vessels and ordered several crew men to walk ahead on the ice and push it aside. While this was being done, the narrow channel froze over. As a result, the two icebreakers lost more than eight precious hours, just because of careless parking!

"If I'd been sure that automobile was empty," the skipper remarked, "I'd have kept on going and plowed right through it."

FERRIS McKESSON, who is now employed by the Santa Fe Railway in CTC work, was chief purser and radio operator of the *Ann Arbor 4* on the wild stormy

night of February 13, 1923, when she sank in Frankfort harbor, and now he tells us about it.

The boat was bound for Kewaunee with a cargo of nineteen freight cars. By all the laws of chance, that badly crippled ferry, drifting helplessly ahead of a fierce storm, with visibility zero, should have been blown between the narrow piers of her home port. Instead, she went down between the piers.

McKesson, at the time, was a youth of about nineteen. "Forty minutes after we set out," he recalls, "a westerly gale sprang up without warning and blew with a velocity of 75 miles per hour. I finished my work and turned in for the night.

"When I awoke, the ship was creaking and cracking, due to a heavy coat of ice. Directly under the radio room a car of coal had broken loose and jumped the track. It was swaying with the violent pitch of the boat, breaking the steel stanchions that held the upper deck and causing the radio room to settle a few inches.

"The captain piped all hands on deck. Every available crew member not on duty was put to work on the car deck to keep the freight cars from running off the stern. The heavy jacks that were used to prevent the cars from swaying in heavy weather had fallen down, and were replaced. Turnbuckles and top chains were tightened, but many of these were smashed and could not be replaced. The car deck was a mess!

"All ship's officers, including the captain, were working shoulder to shoulder with the others down among the cars, dumping the coal cars and trying to dislodge them from the tracks in the belief that by so doing they could keep them from sliding over the stern. A carload of automobiles had already slid off.

"The storm's fury kept up. We had long since lost our bearings but hoped to make the west shore and beach the ship.

"I asked the Old Man, 'Where do you think we'll hit the beach?'

"'My boy,' said the captain, 'it

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Chesapeake & Ohio Railway

While the trainferry *Pere Marquette 18* was sinking, her gallant skipper stood on the bridge waving farewell to survivors in the lifeboats.

looks like we'll land in the Happy Hunting Grounds.'

"His answer didn't make me feel very good. If the cargo in the forward part of our ship had not shifted aft, we might have successfully nosed our way to the west shore, but with our stern down and our bow up, we had no choice but to turn around and run with the wind.

"I sent out a radio distress signal. WFK of Frankfort acknowledged it, and I gave details of our predicament. Later, amid the cracking and creaking of the boat, we heard the foghorn at Frankfort.

" 'A point and a half off the starboard bow,' the first officer sang out.

"Soon we were pounding against the outer end of a pier with every wave. As we still had electric power, I was able to report by radio that we were up against the south pier. This was the last message I sent on that vessel.

"We began to settle. The boiler room was flooded. The men in the engine room and firehold climbed out through the emergency fire escape that led to the upper deck, the only part of the ship not submerged.

"Coast Guards would have shot us a line and taken us off one by one in the breeches buoy, but our skipper, motioning with his hand, made it clear that we were in no immediate danger and would stay aboard until the storm abated.

"About noon three Coast Guardsmen, risking their lives, crawled along the icy wind-swept pier and made their way out to us. They said the marine superintendent advised us to abandon ship.

"To this the skipper agreed. So we tied ropes around ourselves, like mountain climbers, and left the ship in gangs of ten or twelve. We all reached shore with nothing worse than a few frozen fingers, toes and ears. It was a great joy to be on land again. That night some of us younger fellows joined in the gaiety at a St. Valentine's masquerade ball."

"I was wheeling on her at the time," recalls Arthur C. Frederickson of Frankfort, "my Uncle Axel was first mate, and my father, Charles Frederickson, was the captain. We were afraid she'd go down on the beach and break to pieces, with no way for the crew to get ashore. We knew that on the Great Lakes the Coast Guard could not launch boats in such weather, and riding ashore in a breeches buoy at 20 below zero could mean sure death. We considered it a miracle that she was able to make it inside the piers and sank alongside the south pier so that the crew could climb down onto it and walk ashore."

Three months later, after a third coffer dam had been built around her, the *Ann Arbor 4* was raised and towed to the Manitowoc shipyard for repairs. Her record shows ten years more of AA service. Then in 1932 she was sold to the Michigan Highway Commission and renamed the *City of Sheboygan*. Today she is plying the waters between Mackinac City and St. Ignace.

DISASTER struck the *Pere Marquette 16* on a biting cold day in 1901, four days before Christmas. This trainferry cleared the Milwaukee slip of the old Chicago, Milwaukee & St. Paul Railroad and headed for Ludington, 100 miles away, with 26 loaded freight cars. A near-gale was whipping up the lake into mighty waves.

An hour before midnight, when they sighted the harbor lights of Ludington, Captain George L. Thompson relieved the second mate on the bridge. A veteran navigator, he knew that a high sea was pounding the piers. What he did not know was that his ship would run into a sand bar just inside the harbor.

So fierce was the impact that it broke the main steam pipe that led from the boilers to the engine room, quickly filling the hold with live steam. The engines were stopped; the entire ship was plunged into darkness.

Helplessly, the stricken boat swept toward the north pier. She hit the pier a powerful blow, then staggered back and was about to be dashed to pieces when Captain Thompson made a decision that every skipper on all the seas of the world hopes he will never have to make. He scuttled his ship by ordering the seacocks opened. Down she settled in about sixteen feet of water, not far from the end of the pier.

Her hoarse whistle wailed distress signals—until the steam pressure failed. It would be stretching the

Chesapeake & Ohio Railway

Pere Marquette 17 (shown here) reached doomed sister ship, Pere Marquette 18, in answer to SOS.

truth to say that the crew were calm and jovial as they huddled together on the upper deck of their beached ship in total darkness, with the wind howling like fiends, and icy waves washing over them and threatening to break the vessel in two.

NEVERTHELESS, THE men did keep their wits about them; and they were taken ashore in the morning, one by one, when the Coast Guard showed up with a breeches buoy. The only fatality was a coal passer. He had been making his first trip on the lake and could not find the exit passages from the superheated firehold when the steam pipe burst with a roar.

By an engineering feat, the wrecked ship was salvaged, at a cost of $80,000, and was restored to service five months later. Even before her rebuilding got under way, the *Pere Marquette 3*—not a train-ferry but a passenger and package-freight steamer—ran aground on the same sand bar. It was a wild January night but there was no loss of life.

Since then, thanks to a breakwater system built by the Federal Government, Ludington's harbor has become the safest of all the ports on eastern Lake Michigan proper.

Lake Michigan now has the largest train-ferrying system in the world, based not only on the amount of freight carried but also on the number of railroads involved and the number and size of the ferries themselves, and the number of ports served. Total sailing distance for all the Lake Michigan routes is 628 miles.

THE SINKINGS of two Lake Michigan carferries rolled up big casualty lists. One of these, the all-steel *Pere Marquette 18,* had been temporarily converted into an excursion steamer, running out of Chicago during the summer of 1910. In that season, ordinary carferry traffic was light. With a dance floor laid on the main (car) deck and with the shapely Annette Kellerman in a one-piece swim suit high-diving from the ship's bridge to amuse the passengers, the excursions were well patronized by the general public.

It was, you might say, a profitable season. When autumn leaves began to fall, the dance floor was removed and the *Pere Marquette 18* returned to carferry service. Her first trip after being refitted was a Ludington-Milwaukee run with 29 loaded freight cars.

Shortly before dawn of September 8th, in weather that was only moderately bad, she sprang a leak. Water poured in faster than the pumps could eject it. In a move to lighten the ship, Captain Peter Kilty had a dozen of the cars run overboard.

EVEN AFTER that, the ill-fated vessel settled alarmingly. Then a wireless call made history. The ship's radio operator sent out a distress signal—the first of its kind ever transmitted by radio from a Great Lakes craft.

Answering the call, the *Pere Marquette 17* immediately changed her course and put on top speed. The early sun's rays had just begun to gild the cobalt horizon when she sighted the *Pere Marquette 18,* her stern pointed downward, sinking rapidly. Of the 60 or 61 persons who had left port aboard the doomed ship, only 30 were picked up alive. Not one of them could explain what had caused the wreck.

This dark tragedy almost cost, in addition, the life of Captain Esten Bahle, who later became commodore of the Pere Marquette fleet. He was then second mate on the

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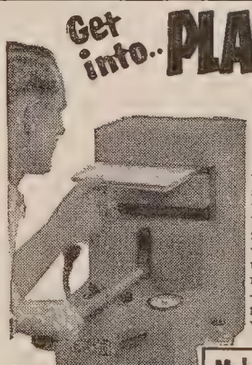

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Canadian National Railways

Mystery shrouds the fate of the Grand Trunk carferry *Milwaukee*, originally the *Manistique*, which left port one October day in 1929, ran into a gale, and was never seen again.

rescue ship and had charge of the lifeboat sent out to get survivors. Due to a signal mixup, the *Pere Marquette 17* suddenly put on speed while the lifeboat was being lowered. This upset the boat, spilling Bahle and his crew into the water.

Then the future commodore, swimming for his own life, was sucked close to the furiously churning propellors. How he escaped is a saga he didn't like to think about afterward. Luckily, the lifeboat was righted, and all of its crew, drenched and sputtering, clambered on board.

Among the bodies picked up was that of Captain Kilty. The courageous skipper, in the best traditions of the sea, was last seen alive on the bridge of his ship, the *Pere Marquette 18,* while she was sinking. Waist-deep in water, he waved farewell to the survivors. His name shall be remembered.

It was nineteen years later when the Great Lakes had its worst carferry disaster. The Grand Trunk's *Milwaukee,* built at Cleveland in 1903, mysteriously foundered in a Lake Michigan storm with her entire crew, between 47 and 52 men.

She had left her name-city at noon that day with 27 loaded boxcars, but, not being equipped with radio, was never heard from again. A gale of hurricane force blew up suddenly. We can only guess what happened aboard the *Milwaukee.* It is more than likely that some of her cars broke loose, damaging the seagate and causing the ferry to list.

Probably, too, the engine room became flooded, making it impossible for the crew to use the steering gear. After that—well, the crippled boat must have fallen into a rough sea trough and rolled over. Thus did the old *Milwaukee* join that ghostly navy of Great Lakes vessels which sailed away and never returned.

A sad commentary on this wreck is that her captain, Robert McKay, a great sea dog, had been due for retirement only a few days after the fatal voyage. Coast Guardsmen of the South Haven station found a battered tin can, opened it, and read the following message, scrawled in pencil:

> **Ship taking water fast. We have turned around and headed for Milwaukee. Pumps are all working but seagate is bent and won't keep water out. Flickers are flooded. Things look bad. Crew roll (is) about the same as last pay day.**

It was signed by the purser, A. R. Sadon, and dated 6:30 p.m., October 22, 1929. Some pale-faced bodies from the *Milwaukee* were picked up off Kenosha. A motorship reported sighting a floating mattress, parts of a wrecked pilot house, and other ship's timbers. That was all. The rest of the story will never be told.

TRACKSIDE GRAVE

(Continued from page 24)

one hogger tried to leave him by heading out a siding too fast. Maybe it was accidental, but sometimes cars were "dropped in" on him, soundless as only free-running loads can be.

A sort of evil cloud hung over Duncan everywhere. For the division remembered Mike Patrim and his fireman, dead in the cab of the 802. And it recalled with sullen shame the fight it had waged to clear Duncan, because—well, because Duncan was then a brother trainman. You went to bat for a brother, right or wrong.

Now Duncan was back, a livid symbol of a mistake. The division didn't want to be reminded of that again.

So Duncan went his silent way, alert, watchful, obviously contemptuous of everything on the road. And just as alert, just as watchful, Johnny Harrison plodded along behind, waiting for him to slip. For Johnny resented being on trial, too. It was a long way to the next step, and an order is an order.

Then came the murky night when Brandt Duncan was called as hind brakeman on an extra west. The call office tipped Johnny. The trainmaster slipped early through the dark train-yard and climbed into an empty boxcar. It was drizzling rain, just the night for a shack to be sticking in the cab when he shouldn't.

Fifty miles out of Port City, Pete Donnelly cut his creaky 800 loose from his train and snorted ahead a few car-lengths to take water. Johnny dropped to the soaked cinders. Duncan should be on the dirt, checking for hot journals. But if the T.M. could catch him dry and warm in the cab, it would be a good excuse to can him.

Halfway back, Johnny saw a light bobbing briskly along the dripping cars. Duncan. On the job.

The trainmaster's ears burned. Suddenly he wanted to get out of sight. Almost angrily he swung up between two wet boxcars. The corrugated ends were slippery. It wasn't the safe thing to do, but it was quick. His clammy slicker dragged at his legs, his shoe-soles were thin and wet. Fear cut into his spine. He half turned to drop back to the ground, and just then Pete Donnelly backed the 800 against the train. Hard.

Slack came running back in a series of grating crashes. Johnny made a frantic grab for an end-ladder that wasn't there. His head thudded viciously against the metal car end and all the strength went out of him. Limp, he slid down the end of the car, bunched crazily over the metal of the meshed couplers, and crunched to the ground, half-conscious and terrified.

He tried to rouse himself. His fingers dug into the wet cinders as he struggled to drag his unresponsive body clear of the rail.

The hoarse whistle of Number 800 blasted the night, calling in the flag. Down on the rain-swept track, the wave of blackness receded from Johnny's brain and flooded back again. Inches away, the low-dragging brake rigging was waiting. When the train moved—

Twice more Pete Donnelly jerked his whistle cord. The hiss of air from releasing brakes sounded like the last preliminary to a messy death for Johnny Harrison. Teeth chattering, the T.M. choked out what could have been a prayer and closed his eyes.

Then something jerked him violently sideward. A flange touched his leg, crunched horribly at his slicker. Something ripped free—and Johnny Harrison rolled down the fill with Brandt Duncan into a briar patch, while the extra moved ponderously past.

Duncan's voice, dry and colorless, sounded in his ear.

"Sort of evens us up, cap," he said. "Just lay there while I sign this rattler down."

THREE DAYS later the bespectacled Johnny dragged his bruises and blackberry scratches into Buck Quillan's office. The superintendent scowled at him.

"No wonder I have ulcers," he grunted, "between you and Duncan.

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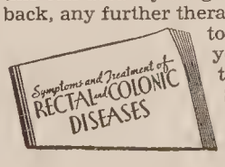

Now I guess you want him to have a medal."

Johnny stared. "He jerks me out from under a truck, and I ought to get him fired. A guy I outweigh by forty pounds. He knew I was tailing him. What'd you do, boss?"

Quillan sighed. "It's not for us now."

He slid something across the desk—a photograph, front and side. Fingerprints and a long number. The name wasn't the same, but you couldn't miss the likeness.

"Your boy got into bad company when he drifted East," Quillan said regretfully. "He was a finger man for a mob. *He's a killer,* Johnny! Sorry."

The T.M. gulped hard. So that was the quiet, colorless, cold-eyed Duncan!

"It figures," the superintendent stated. "Where would he find a better place to hide? His old name, his home division. He'd be safe here for a while. Then he could wander on. Might even make it to Mexico."

Quillan heaved himself to his feet and winced. "Damn ulcers! Got to go home. And," he grinned at Johnny, "I didn't get around to reading my mail today. Tomorrow I will."

Back in his own office, the trainmaster listened as a freight rumbled past. A manifest job—gasoline, oil, LPG. He reached for the telephone. It was a 53: conductor, G. Smith; engineer, P. Donnelly; head brakeman, B. Duncan. Leading characters in a drama that was drawing to a final curtain.

Johnny sighed. Well, this would be Duncan's last trip. When the blue-eyed little brakeman reported back at the end of the run, Les White would be waiting. Les White, the division's special agent. That bull never lost a prisoner—alive.

At two a.m. the phone beside Johnny's bed jangled him half awake. The night chief dispatcher clipped off his news with practiced terseness: Number 253, twenty cars spilled, milepost 51.2. Not on fire—yet.

Johnny got dressed, out of the house, and into his Buick in four minutes flat. So Duncan was a killer? Owed a debt to society, eh? But Johnny owed *him* a debt, too. Sooner or later, the trainmaster figured, the law would catch up with Duncan. But not right now.

Shortly after the first pale streaks of a cloudy daybreak, Johnny arrived at the pile-up. Reek of gasoline from the ruptured tank cars filled the air. Gasoline was flowing into the ditches, along the ditches, and spreading out to the drab flat country. Pete Donnelly's stub-stacked 800, her rear tender truck derailed, squatted dangerously near disaster. It wasn't even safe to dump the fire.

The derrick nosed down to the spill, its cables wrapped to keep the sparks out. Wouldn't take much to start a blaze. Not very much.

"Morning, cap. We got a picnic."

Duncan had materialized out of a welter of wreckage. Without a word, Johnny fished the Rogue's Gallery photo from his pocket and handed it over. The runty brakeman glanced at it with a lack of expression. Then he nodded to the trainmaster.

"My car's at the crossing," Johnny said with a faint smile. "Keys in it. Maybe you won't get far, but—good luck, Duncan!"

Duncan gazed at the sky. Suddenly his old hunted look seemed to have gone.

"A guy gets tired of running," he mumbled. "Ain't worth it—"

THE SCREAM of a whistle drowned his words. Pete Donnelly was leaning from his cab window, gesturing frantically toward the road crossing. Johnny looked, and froze.

A gleaming puddle had formed on the dirt road—gasoline from the broken cars—deep and wide and deadly! And toward it lumbered a red-and-yellow school bus. Every window framed the curious faces of boys and girls.

Johnny's voice cracked in a yell as he stumbled toward the crossing. But the bus reached there first. Once more Pete Donnelly bore down on his whistle cord. And the young bus driver got the idea. He jammed his brakes and killed his engine, halting the vehicle in a reeking death-trap!

The trainmaster quickly splashed through gasoline up to his knees and tore at the bus door. It creaked open. Children's voices babbled excitedly.

"Stay off that starter, kid!" Johnny commanded. "All right, everybody out! Big wreck! Get moving!"

He began yanking sixth-graders from their seats. The youngsters made a game of it, squealing in fun and tumbling over each other.

"Step on it! Hurry it up!"

From a quarter-mile away came the dull *whoooom* of igniting gasoline. Flame and smoke mushroomed toward the morning sky. Terror welled up in Johnny's brain.

From the exploding pile, leading directly to the pool, was a ditch filled with the stuff—a fuse to a deadly bomb!

The kids saw it, too, and the fear took hold of them. In an instant they had jammed in the narrow door. Wildly, Johnny tore at the mass.

"Duncan!" he shouted. "Duncan!"

He could fairly see a little ripple of fire skipping along toward him. Toward him and toward the school bus.

"Duncan! Help me!"

Over the distant howl of leaping flame, he heard a voice, Duncan's voice.

"Donnelly!" he shouted over the roar. "Steam—wide open!"

Out of the corner of his eye, the T.M. saw Brandt Duncan lunge behind the tank of the 800. Then he heard the screaming roar of pent-up steam as Pete Donnelly sent full boiler pressure into the steam-heat line the 800s carried for passenger service. Live, howling, and incredibly hot, the steam ripped into the cinders.

That's the story they tell. Of Duncan, on his knees behind the derailed tender, gripping with bare hands the twisting, bucking rubber steam hose which was sending the blue-white vapor squarely into the flooded ditch, a few yards ahead of the racing flame.

Steam blasted the fire back upon

itself, held it away. Seconds he bought, seconds for Johnny, seconds for the children in the bus, seconds for the eternal peace of mind of the Atlantic Division.

Sobbing, Johnny broke the jam; the boys and girls came tumbling out. Johnny yanked the young driver from his seat and lunged for safety with the fear-paralyzed fellow in his arms.

And he made it—just as an eerie, rising shriek came from the 800—and a sound the division never forgot. The scream of a man taking full in the face the incalculable fury of two hundred pounds of hell-broth!

The over-age steam had blown itself free. Then came another terrifying noise, a sort of whispered *whupp-whupp* of flames, and the empty school bus had become a blazing furnace.

Johnny plunged blindly into the cloud of steam, groping for Duncan. But Guantanamo Smith was ahead of him. Pretty soon the big, burly griever staggered out of the roaring whiteness with the limp figure of the little convict-brakeman in his arms. Tight-lipped and gently, he laid his human burden, still living, on the ground. Steam boiled from the man's clothing; the sight was ghastly.

Johnny bent over and put his lips close to the dying man's ear. "The kids got out," he said. "Duncan, you saved them!"

The brakeman gave a faint indication that he understood.

"Mother of God," whispered Guantanamo Smith, "please make it quick!"

And as they waited, the Angel of Death, hovering low, settled at last and mercifully on the scalded, pain-wracked body of Brandt Duncan. The watchers heaved a tense sigh of relief.

GUANTANAMO said it, the day the division buried Duncan: "Whatever he was back there, we don't want to know. All we remember is what he did at the end. That's why we're givin' him a trackside grave with full Brotherhood honors."

Yes, they laid him to rest beside the rails that glinted brightly under a hot sun, in the dubious shade of a lone palmetto tree. The SG&A Railway ran a special train to the funeral, and just about everybody who could get the time off rode it. One end of the baggage car was heaped with floral emblems. The local of the Brotherhood of Railroad Trainmen was represented, of course; Guantanamo saw to that. The president of the road sent flowers. So did the mayor of Port City, and the district school, and the parents of the kids who'd been snatched from a fiery death, and a lot of others.

Buck Quillen, the division super, forgot his ulcers long enough to attend the rites, along with Trainmaster Harrison, the cinder dick Les White, and the rest. It was Johnny who insisted on paying for the granite headstone.

"A debt I owe," he said.

And on the other side of the track, Superintendent Quillen turned the first shovel of earth for a hole into which the section men rooted a station sign bearing the name *Duncan.* Everybody knew there wasn't a station nor any kind of building for miles around, but they called the place Duncan just the same, and Duncan it is today.

That was years ago. A lot of things have changed. The SG&A is now using diesel power, for one thing. But the trackside grave is still there, and the depot sign, and the lone palmetto. Gandy dancers keep the sepulcher green, the marker stones whitewashed. And once a year, on the anniversary of the oil-train wreck, the district school closes for the day to let the pupils and their teacher take a bus ride to the desolate grave with flowers of remembrance.

Even today, the long sleek diesels hoot a mournful salute while passing milestone 51.2 in the wasteland north of Port City. Now and then a passenger from up North will ask the conductor about it. And in reply, for the umpteenth time, he'll tell the story of a man who, in one shining moment, found a purpose for a life that had been sidetracked somewhere along the line. ●

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ROMANCE

Until 1948 a dilapidated cross marked Casey Jones' grave at Jackson, Tenn. Then Lucius Beebe and Charles Clegg erected this memorial.

MAIL CAR

(Continued from page 6)

Says Bert: "I'm happy now. Something to do. Every fellow needs something to do." •

B&M IS SPENDING more than $11,000,000 to improve its passenger service, including 12 new diesel locomotives and 55 Budd Highliner cars—the largest Budd Highliner order ever placed by a road at one time.

"This," comments Carl V. D. Ehrke, "edges out the New Haven in the number of such cars, the New Haven having 40. The Boston & Maine plans to run 170 daily trains with the new equipment, retiring 235 older-type commuter coaches and 75 steam locomotives." •

CONTRADICTING an official press release, Frank Walton, Parksville, Vancouver Island, B. C., Canada, says the British Railways' new 2-10-0 freight hog is *not* the first 10-coupled steam engine to be built in Great Britain. He points out that during World War II the North British Locomotive Co. built 545 "Austerity" 2-8-0 types, followed by 150 of the 2-10-0s. Most of the latter have since been sold to Holland. •

C&O IS DONATING 21 steam locomotives to help rebuild the war-torn Republic of Korea. Of these 18 are 0-8-0 switchers (C-16); three are Consolidations (G-5). South Korea lost more than two-thirds of its rolling stock and rail equipment in the recent war. For a picture of these seafaring babies, see page 75. •

PHANTOM TRAIN pictured in our September issue reminded E. A. ("Frog") Smith, Rte. 2, Bayshore Rd., Fort Myers, Fla., of an incident that occurred late one night in 1897 when his father, a hogger, was pulling a log train through the Georgia hills.

Frog writes: "He saw what looked like another engine coming at him with a lantern hung on the back of the tender. Knowing it would be suicide to jump in the dark, and with no time or chance to stop on the downhill, Dad and his fireman decided to ride it out. They hit the light on the creek trestle, and the headlight went out without a jar.

"Before Dad stopped to investigate, he opened up and pulled to the top of the next hill. Then he found the glass unbroken but covered with a jelly-like substance that glowed faintly greenish when held in the dark. He decided that the 'ghost train' had been a will-o'-the-wisp.

"Dad's engine was the 2-spot of the old Flint River & North Eastern, better known as the 'Ticknor, Tootem & Hell-Western,' that used to run between Ticknor and Pelham, Ga. She was a 42-ton Baldwin Mogul with 4-foot drivers. Once when he was running through Satilla River swamp his pilot scooped up a bear. Several log-choppers riding the front end got the scare of their lives and stampeded, trampling Dad and his fireman.

"I remember the day in 1903 when that Mogul made a mile a minute in getting to the Pelham mill fire. Dad died in 1905. Four days after the funeral his old engine turned over down a fill, completely stripping herself." •

LIGHTNING SLINGER. Ben Dulaney wrote about Norfolk & Western's Luetta McNeil (July issue): "She became interested, then fascinated. In four months she was sending 40 to 45 words a minute."

"Is the author kidding?" comments H. Y. Ballou, 3420 Alma Ave., Manhattan Beach, Calif. "If he means it, that gal could really sling lightning! Further on, he states: 'She keeps her bug at the office and practices telegraphy with other operators when there is opportunity, but she says her speed is slipping.' If Luetta can handle 45 words per minute, she should get a well-paying job in a broker's office or with the Associated Press." •

NARROW-GAGE Keeler-Laws branch of the SP in southeastern California, 71-mile remnant of the Carson & Colorado, is now being operated by a diesel, reports James R. Fryer, 604 W. Stocker St., Glendale 2, Calif.

"Of the three original steam locos the SP had on this line," he writes, "No. 8 is being used on the Portland Cement Co. slim-gage line at Plaster City, Calif. The other two, Nos. 9 and 18, remained on the SP branch until the diesel arrived, No. 9 making daily runs and No. 18 in stand-by service. Then one steam engine was to be rebuilt from the best parts of the two and kept on the branch in reserve, while the other one will probably be placed on permanent display at Independence, Calif."

We learn from Tal Morehead, retired SP switchman, Novato, Calif., that two water tanks, relics of the old narrow-gage C&C, are in use today on a ranch at Reno, Nev., and can be seen from the highway. •

ROSTERS. We asked our readers: "Do you want current diesel rosters or past-history steam rosters? Or would you prefer rosters of roads, big or small, that are mostly dieselized but still have a few steamers left?"

"Print them all," replies E. Harper Charlton, a longtime reader, 746 S. Lake St., Los Angeles 57, Calif. "If a standard railroad is all or mostly diesel, give us the roster. I will never respond to a diesel as I have to steam, but diesels are here to stay and I might as well be briefed on them."

Says Jack Willard, Box 212, R.R. 2, McHenry, Ill.: "Let's have up-to-date diesel rosters rather than the rosters of scrapped steam power. Include each road's locomotive color scheme."

John Locke, 426 Prospect Ave., Hackensack, N. J.: "I prefer past-history steam-rosters."

These comments just about sum up the many readers' answers to our roster questions. There is no clear-cut majority. Some men like diesels, others are loyal to steam but will tolerate diesels, and still others classify diesels with poison ivy.

Our September issue carried a past-history steam roster, October a diesel-and-steam roster, and this month an all-diesel line-up. Next month we will run a PRR roster—steam, diesel, and electric power. With this variation we cater to all tastes in North American engine rosters. If anyone knows of a better policy, we'd like to hear from him.

Supplementing our Toledo, Peoria & Western roster is this data from J. F. Webber, 7230 Wilcox Ave., Bell, Calif.: engines 50 through 54 were 4-6-0s built by Baldwin in 1904 with the builders' numbers 23587, 23598, 23613, 23622, and 23636. Engines 55 through 59 were built by Baldwin in 1905 with 19x26-inch cylinders, 63-inch drivers, and builders' numbers 26637, 26650, 26651, 26652 and 26688. Engines 60 through 63 were originally Nickel Plate 764, 772, 768, and 771."

The introduction to our Chicago & Illinois Midland roster said the Pekin-Springfield line carries passengers. It doesn't. Also, it has recently bought six ACL 2-10-2s and scrapped some of its ex-Wabash power. •

ELEPHANTS have long been a problem to jungle railways. An English-language newspaper in Sumatra, East Indies, stated: "Elephants seem to be on the increase in Acheem. A light railway train which runs along the edge of the jungle was held up by a herd of 40 big tuskers, which leisurely amused themselves by pulling up all the fencing and boundary posts in sight before they decided to move on." •

STEAM POWER is still prevalent in some parts of British Columbia, reports Carl Newman, 955 Cloverdale, Victoria, B. C., Canada, son of a retired hogger.

"This area," he says, "has Canadian National 0-6-0 No. 7252, formerly 7040, and 2-8-0s numbered 2096, 2099, 2100, 2104, 2110, 2116, 2120, and 2121, without a Walschaert valve motion among them. The most recent arrival here is 0-6-0 No. 7543, formerly National Harbor Board 204, from Vancouver, with Baker valve gear." •

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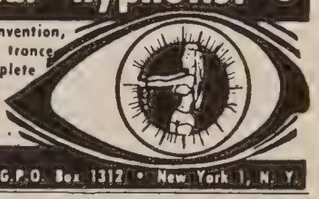

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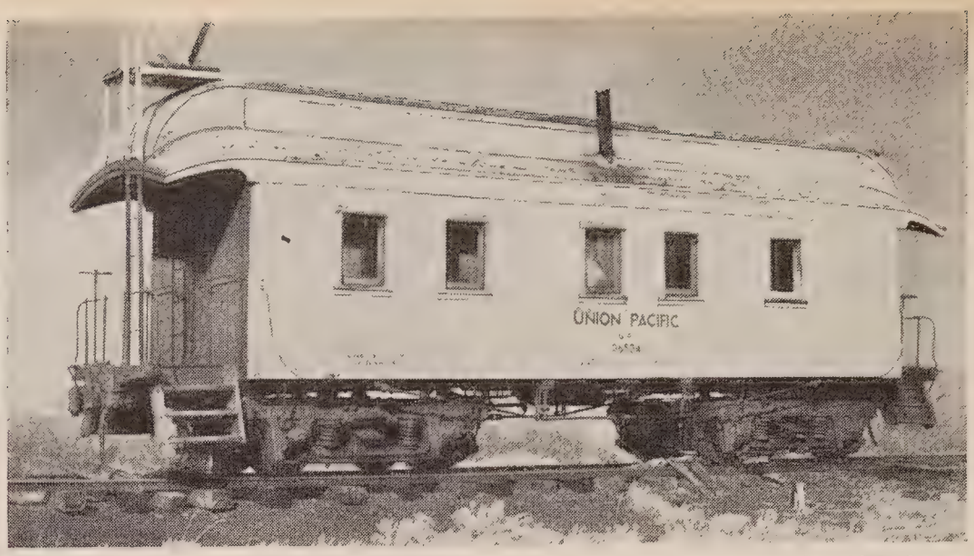


Donald R. Connor

Wooden bunk car from Laramie, N. P. & Western line ended up on U. P.

THE KATY announces a one-third reduction in round-trip coach fares between Denison and San Antonio, Tex., and way stops. This, we believe, is the sharpest cut in fares ever made by a Southwestern railroad. •

FOR THE FIRST time in its long history, the Pennsy has engaged a firm of management consultants to study the company's organization and structure and to offer ideas for improving it in the light of practical experience, present-day competition, and advances in the science of industrial management. This move by the very conservative Pennsy is the current trend. •

"ONE of my favorite *Railroad Magazine* articles was on the development of the Pennsy's E-6 Atlantics," writes Charles J. Murphy, 3330 Buchanan St., Mt. Rainier, Md. "Some of your correspondents may denounce that subject as too technical—and it probably is for them—but such material explains why I buy the magazine. I want to learn more about my hobby than is available in general publications.

"It must be a rough job straddling a variety of reader viewpoints, represented on one side by the older railroad men who view the magazine as a sort of fraternal house organ and on the other side by young railfans."

Mr. Murphy warns us not to veer toward the Sunday supplement type of article, aimed at readers whose interest in the hobby is only casual. In this class he puts "The Pope's Creek Peddler," by Phil Dessauer (July issue). •

A RAILFAN who found Dessauer's article "very interesting" is the Rev. David B. Russell, minister of the First United Presbyterian Church, 1541 Randolph Rd., Schenectady 8, N. Y.

Dr. Russell's first train ride was on the Delhi branch of the "Old & Weary" (NYO&W) shortly after the turn of the century.

"Like most boys, a train ride thrilled me, and I have never gotten over it. At one time I worked as a baggage man at the Pennsy's 30th Street station in Philadelphia. After I grew up and became a minister, I purposely took various rail routes on my trips to meetings and for preaching dates. I have ridden trains in every state of the Union and on 126 different roads, for a total of nearly 40,000 miles.

"I have had some exciting experiences such as being locked up at Allentown, Pa., for allegedly taking a picture in wartime; chasing a train on a scooter in West Virginia, and riding practically all of the D&RGW narrow-gage as well as the Rio Grande Southern and a woodburner on the Live Oak, Perry & Gulf and the old Trans-Florida Central—a bizarre outfit with a 1923 Model T for motive power." •

GEARED LOCOS. "I see that a gent named Elvin Endicott wants you to publish an article on geared locomotives," writes Ivan W. Saunders, 6625 Tennis St., Pittsburgh 6, Pa. "That's fine, but you're gonna have difficulty with Heisler and Climax types in the number of locomotives built. I know of no one with Heisler or Climax records. Wish I did. I've been trying for years to locate such records.

"Records of the Lima Shays built (including that Willamette in Oregon) are not so hard to get, but there has been so much 'second-handing' of Shays that the total number of geared engines

now running can only be guessed. Many of these are hidden in lumber, coal, and other non-public industrial roads, and are not listed in rail guides or books.

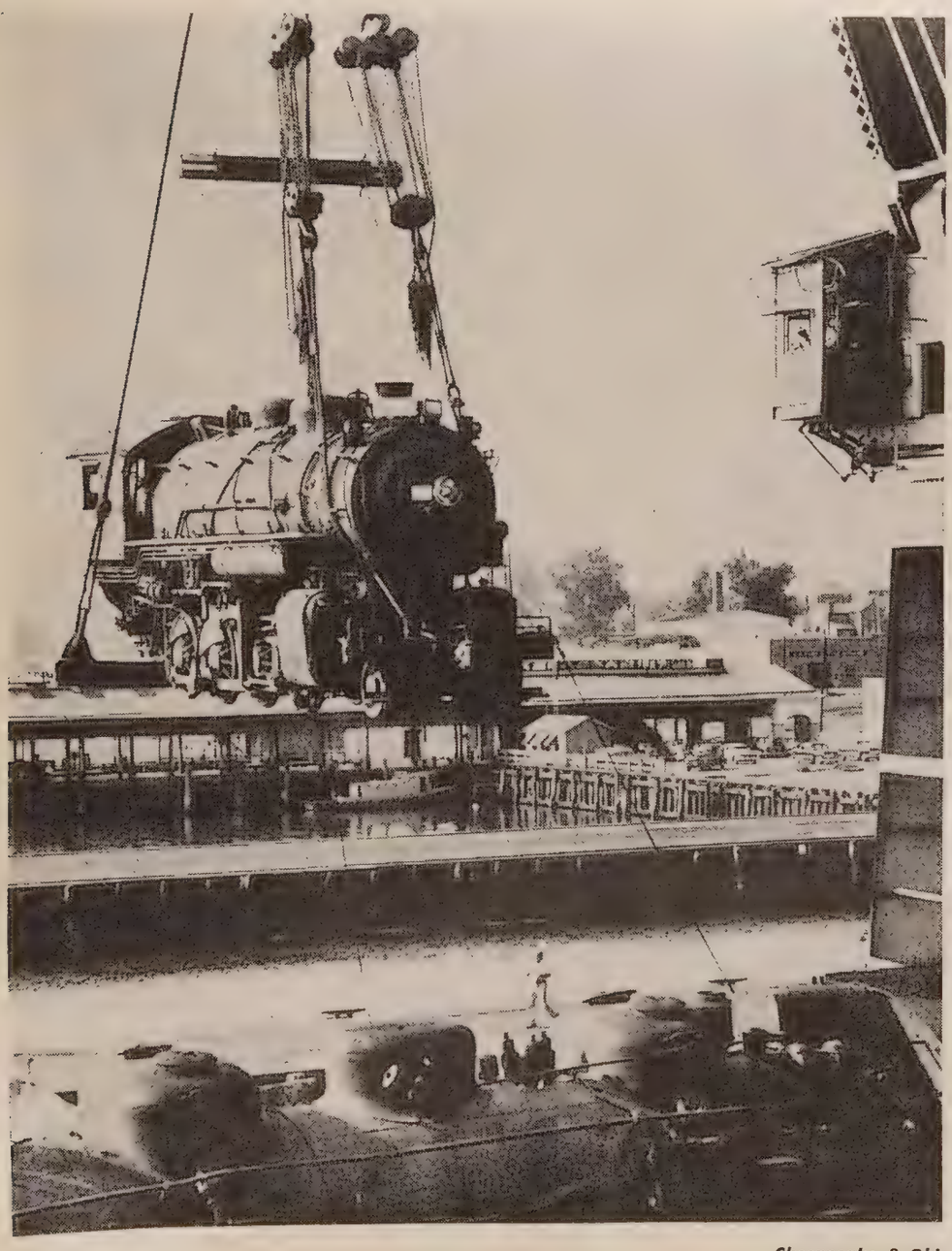
"Geared jobs are the only types of steam power now running in which you can view a diamond-stack and variations of it in operation." •

1904 WAS the year when Frank P. Savage, Rte. 2, Box 2674, Paradise, Calif., headed for the wide-open West, after working on the Maine Central. "In those days," he recalls, "many trainmen packed six-guns of 45 calibre and knew how to shoot them. One conductor I knew would aim at ducks when his train was rolling at 30 per, and more than once, when he missed the ducks, his bullets cut the Postal Telegraph wires right in two.

"In 1906-'07 I was a pumper-operator at Sandia, N. M., but I do not remember the names of any of the men on the trains that met at Sandia the day that a certain Mexican's rooster disappeared into a pot on a caboose stove."

Mr. Savage, author of "Fifty Years Ago" (July issue), has written up his Western railroad adventures in some detail. We'll publish 'em as soon as we can find space to do so. •

"I GREW UP on the Clinchfield Railroad in the Blue Ridge Mountains," says Ralph Connelly, 918 Central Ave., Charlotte, N. C. "A little branch of the Clinchfield known as the Black Mountain Railroad runs between Kona and Bunsville and boasts the only



Chesapeake & Ohio

G5 Consolidation, one of 21 C&O engines given to South Korea, goes aboard SS Edison Mariner. The 2-8-0 crossed over on rails welded to deck.

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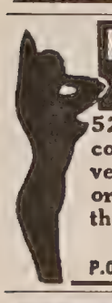

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steam locomotive left in this area, the 99. At one time this railroad climbed part of the slope of Mt. Mitchell, the highest peak east of the Rockies, but now only runs as far as Bunsville and has dropped passenger service. It is a thrill to see the smoke plume of the lonely little 99 mingle with the haze that hangs over the Blue Ridges like a fading relic of bygone days." •

ONE BY ONE, a few steam locomotives saved from the blow torch are kept as museum pieces. We learn from Engineer L. S. Griffin of the Milwaukee Road, 6504 Cady Rd., Everett, Wash., that Weyerhaeuser Timber Co. has just set up an outdoor forestry museum near its Longview, Wash., office building. The first two pieces of equipment moved to this museum are an old logging locomotive and a smoke-belching steam log skidder.

A Northern Pacific engine, No. 1364, built by Baldwin in 1902, has been installed in Point Defiance Park as a gift to the city of Seattle, Wash. For her first 25 years the 1364 assisted the *North Coast Limited* over the Cascades from Lester to Easton through Stampede Pass. Later she was used on branch lines where modern diesels were too heavy for existing bridge construction. Now, her work ended, she stands on 78 feet of track with treated ties and crushed rock ballast.

Word comes from Reginald E. Button, secretary, H.O. Model Engineers Society, 61 Province St. S., Hamilton, Ont., Canada, that the Toronto, Hamilton & Buffalo has presented Consolidation engine No. 103 to his city for permanent exhibition in Gage Park. This engine was built in 1910 by the Montreal Locomotive Works as No. 52 and was renumbered 72 in 1918 and then 103 in 1919.

She was presented intact, freshly painted and with no parts removed but with every removable part welded down to discourage souvenir hunters and junior-size junk dealers. The cab is curtained. With periodic painting, there should be no danger of rusting or weather erosion. She spent most of her years in freight service and was never involved in an accident. •

CONDUCTOR on the Union Railroad, W. J. Mitchell, 959 Smith Lane, Munhall, Pa., writes: "Our railroad has had some of the oddest steam power I've ever seen, such as the big 0-10-2 tank boosters and the 0-6-0 tank booster engines. Also a lot of 0-6-0 switchers with front and rear platforms and side steps, and a great number of 0-6-0s equipped with stokers. Where else have you seen the like?

"I'll never forget the far-off call of a lonesome steam whistle nor the thunder of a huge 2-8-8-0 on Whitehall Hill on the Baltimore & Ohio's W&P Division out of Pittsburgh. My dad took the first Mallet from Glenwood, Pa., to Benwood, W. Va., more than 20 years ago." •

RETIRED Canadian Pacific hogger, George L. Brown, 319 Maple Row, Lancaster, N. B., Canada, tells us that he enjoyed nearly all his 44 years of railroading and is now collecting engine pictures, passes, and other railroadiana.

"On June 13th," he says, "I was one of the many who rode behind the last steam engine to run on the Maine Central. It was a grand trip, climaxed for me by the fact that I met a pen pal, Carl W. Hendrick, who flew all the way from Los Angeles to ride that train.

"I enjoyed the full-page poem, 'Ghost Story,' in your September issue and I wish you would run a poets' corner every month. I am sure that an appeal to your readers would bring hundreds of oldtime rhymes to your desk." •

"YOUR MAGAZINE is very popular with some of my workmates," writes Isaac Kirkham, *Santa Fe*, 206 Furlong Road, Turnstall, Stoke-on-Trent, England. He reports that a railway stationmaster and a porter drove an automobile furiously through a rainy night from the station at Reading, England, in pursuit of a runaway heavy locomotive. One main-line train, due to cross the runaway's path, was halted by a signal, while another train was delayed an hour for the same reason. The two pursuers made a three-mile dash before overhauling the runaway at Kingsmere Bridge and managed to climb aboard. It is not quite clear how the locomotive, with no one in the cab, got started. •

"DAN PATCH was a pacer, not a trotter," comments Roy Bailey, 217 Stratford Ave., Pittsburgh, Pa., referring to the article, "Treat Your Horse to a Train Ride" (Aug. issue). "Trotters and pacers bred for harness racing are standardbreds, not thoroughbreds." •

PROBLEM. Bill Knapke, 3608 Bickerstaff St., Apt. C, Lafayette, Calif., submits this one: Two freight trains of

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100 cars each have a meet at a siding that will hold only 100 cars and two locomotives. Either engine can handle 100 cars but no more. On the siding, where the trains meet, are 100 cars, which may be *pushed* from either end but on account of a number of "extracted lungs" (drawbars out) cannot be pulled. How do the trains get by each other and leave the cars on the siding where they found them? (Answer on page 78.) •

BILL KNAPKE tells us that Harry Bedwell's story, "Against Orders," in our September issue, was based on an actual happening in his (Bill's) life. He writes:

"I'm tickled pink to see Eddie Sand once more in the pages of *Railroad*. In this case Harry used the following incident I related to him some time ago:

"I was braking on the Santa Ana local on the SP's Los Angeles Division. One day I received a message from H. V. Plant, division superintendent, that read, 'Are you a telegraph operator?' My reply was: 'No, but can learn if desired.'

"To this day, I don't know why Mr. Plant asked that question. He may have had me slated for some job where telegraphy was required. Anyhow, I bought a learner's set that worked by a dry cell, I got the Santa Ana operator to write me the Morse code, and I was on my way. In time, I could send messages in a heavy ham-handed fashion that could be read, though it must have sounded like a herd of stampeding horses.

"Meanwhile, I was promoted to conductor. One night, on an eastbound extra, we had a meet with a westbound extra at Salton. We headed in at Salton and waited. No extra. Salton being a day office, the operator presumably was sleeping. I tried to awaken him. No soap. Likewise no operator. (Later, I learned he had gone to see a dentist.)

"Prowling around, I found a window I could open, crawled in, and went to the telegraph key. I called, 'FS DS DS SA.' The dispatcher, a guy named Charley, answered. I hammered: 'Don't say anything but yes or no. Will extra be here soon?'

" 'No,' answered Charley, and began slowly and carefully to tell me about it. Before he got three letters out I was lost. I 'broke' him and said: 'Don't say anything but yes or no. Can I go to

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Bertram for extra?' He replied, 'Yes.' I asked, 'Will you protect me if I go to Bertram?' 'Yes.' 'OK, I'm gone,' and I climbed back out of the window, told the hogger my story, and away we went to Bertram, which was an open night office.

"That incident created quite a bit of amusement all over the division as, of course, every operator on duty listened in. But I moved my train, and that was why they had conductors—to get trains over the road. Oh, yes, the engine on westbound extra had a bursted flue and died somewhere east of Niland. Now you know where Harry Bedwell got the dope for his latest yarn."

Speaking of fiction stories based on fact, we learned from Flem D. Smith, Box 551, Georgetown, Ky., that Jack McLarn's "Trainmaster" (Aug. issue) was built around a train wreck at Woodstock, Ala., on the Alabama Great Southern.

"Flem is right," comments Jack. "I deliberately toned it down to keep out of arguments, particularly with my dad, who was trick man on the division—although he wasn't working that ghastly Sunday. The characters in my 'Trainmaster' fiction story are real, up to a point." •

HARRY BEDWELL, who is now writing another boomer op story for us, reports from his home, Rte. 1, Box 114, Gaston, Ore.: "It's been gratifying to find that Eddie Sand has long ago penetrated the Northwest. The first trick I worked up here for the SP, the dispatcher wanted to know if I was the guy who wrote the Eddie Sand yarns. Incidentally, I am very keen on *Railroad's* new format. There is a definite place in our American literature for such a publication, as much of a place as for any other magazine, including those with big circulations. I know your editorial crew will fit *Railroad* into its rightful place." •

ANSWER to Bill Knapke's problem on preceding page: Train No. 1 stops one car-length east of the east switch, cuts off the engine, and runs down and gets in on the west end of the siding. No. 2 pulls down between the switches, cuts off the engine, goes against the siding, and *pushes* bad-order cars and No. 1's engine 200 car-lengths west of the west switch. Then No. 2's engine returns through the siding to the head end of her own train and backs it west of the west switch. After that No. 2 cuts off, heads against No. 1's train and drags it down the main line between the switches. Then cuts off, gets hold of own train, heads through the siding, and train No. 2 goes on its way. No. 1's engine *pushes* bad-order cars back onto the siding, gets onto head end of her own train, and departs. •

BOOMER

I'VE HEARD the sagebrush whisperin',
When the sun sank in the west,
I've seen the purple shadows restin'
On the desert's quiet breast.

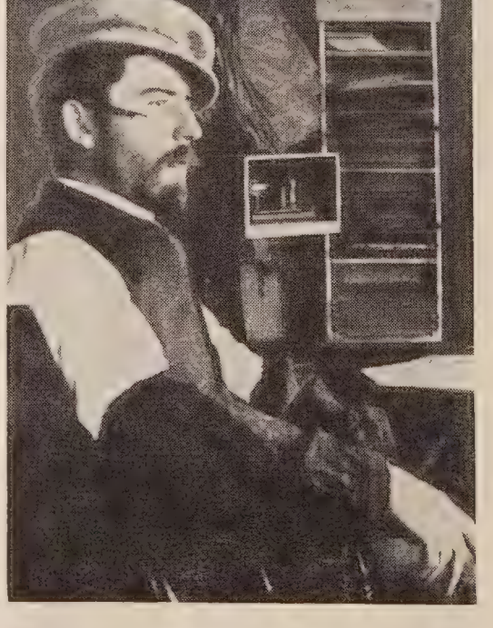
I've rested at night on wooded shores,
In a campfire's mellow glow,
While loons were callin' across the lake
And crickets were chirpin' low.

I've seen the peaceful countryside
From the top of a speedin' train,
With the rails and wheels a-hummin' to me
A wanderin' heart's refrain.

I've seen the semaphores a-blinkin'
Along the shinin' tracks
And the silver lamplight streamin'
From lonely little shacks.

So I must pull the pin, lads,
I'm movin' down the line,
For memory has sent its call-boy
To waken this soul of mine.

—Douglas W. Ward



Harry C. Temple of Woodstock, N. Y., creator of "Back in the Days" (page 64), as he looked when he was a Nickel Plate operator.

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RON CHANDLER, 324½ Central Ave., Holland, Mich., wants big, fullcolor reproductions of H. Fogg steam loco paintings; give details.

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(*) BOB COOPER, 2861 Corning St., Los Angeles 34, Calif., wants photos. and info. on railcars, old and odd rolling stock; pix SP, PE, DRG, maps of PE, D&RGW.

(*) O. R. CUMMINGS, Box 242, Newburyport, Mass., is author of 20-page history, *Portsmouth Elec. Rwy.,* 50c.

G. S. DAWSON, Box 42, Hico, Tex., will trade rr. books, other railroadiana, for antique guns; send for list.

(*) R. H. DEITER, 410 Westminster Rd., Brooklyn 18, N. Y., wants pix of British Rys., pre-nationalization, LMSR, LNER, GWR, SOU.; negs., any size, prints 5x20, 116 and up; also foreign subways.

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(*) PHIL FRIEND, 92-28 51st Ave., Elmhurst 73, N. Y., sells 3½x5 trolley prints, PSCT-Newark, NYCTS, QBRY & BERA, 7 for $1; list, 3c stamp.

(*) TOM GRAY, 1310 Lunt Ave., Chicago 26, Ill., will swap size 616 negs. of Calif. and Midwest elec. and steam roads for NYC, PRR, NH elec. and steam power.

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(R) ROBT. HANNUM, 38 Spring St., Portland, Conn., will sell 86 issues *Railroad Magazine,* 1939-'51; '39 vol. compl., others odd issues; nearly all good cond., $10. Also 7 issues *Baldwin Loco. Mag.,* betw. 1926-'37, good cond., $3; 25 issues *BLF&E Mag,* 1928-'30, odd issues, fair cond., $2.

W. C. HENDRICK, 671 Eastmont Av., Los Angeles 22, Calif., wants pix, orders, tts. and emp. tts., info. of Verde Tunnel & Smelter RR; exch. for Western photos., etc.; also Manchester Loco. builders plate.

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(R) DICK KISTLER, Box 547, Superior, Nebr., offers good Voigtlander 120 camera and leather case, $17.50; also back issues of *Railroad Magazines,* others, good cond., 12c ea.

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(*) BILL LEUTZ, 116 Dartmouth Dr., Toledo 14, O., will buy Joe Gallaway's *Interurban Trails.*

JOHN LOCKE, 428 Prospect Ave., Hackensack, N. J., wants good p.c. size negs., older types steam locos, esp. Erie and Camelbacks; will sell or trade p.c. size pix of Erie, CNJ, LV, LNE, Raritan River, Rdg. steam locos.

(R) GLEN MADER, 907½ E. 12th, Sweetwater, Tex., will sell all *Railroad Magazines,* 1941-'54, fair to good cond., with covers, $25; sells steam thresher catalogs

ROBT. MARGOLIN, 454 Riverside Dr., New York 27, N. Y., will swap several AT&SF '54 calendars and posters for same of other roads, or sell $1 ea., postpaid.

(R) DON McCLAIN, 709 Main St., Cincinnati 2, O., will sell to top bidder compl. file, 160 issues, file *Railroad Man's Magazine,* Vol. 1, No. 1, Oct., 1906, to Feb., 1919.

JOE McCORMICK, Brooklands, Suffern, N. Y., offers 6 assorted Erie cash fare receipts, or 3 diff. uniform buttons, for 4 photos of steam locos, any size.

MIKE McLAUGHLIN, 4526 52nd SW, Seattle 6, Wash., wants photos, emp. tts, Pacific Coast, Columbia & Puget Sound; also BN emp. tts.; buy or trade.

(R) R. A. MEACHAM, 206 Dearborn Ave., Winnipeg, Canada, will sell all *Railroad Magazines* for 1948, good cond., $2 postpaid.

GEO. MENGE, 5013 N. 35 St., Arlington, Va., will sell, 10c ea., p.c. size pix Sou. steamers on way to scrap: Nos. 6041, 6045, 6302, 1380, 4523, 1476, 1487, 4805, 4834, 4911, 1859, 1843, 1882, 1877, 648, 1847, or swap for p.c. prints any steam, diesel, elec. loc. in N. Amer.

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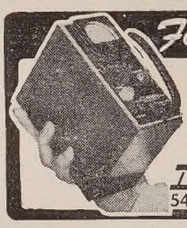

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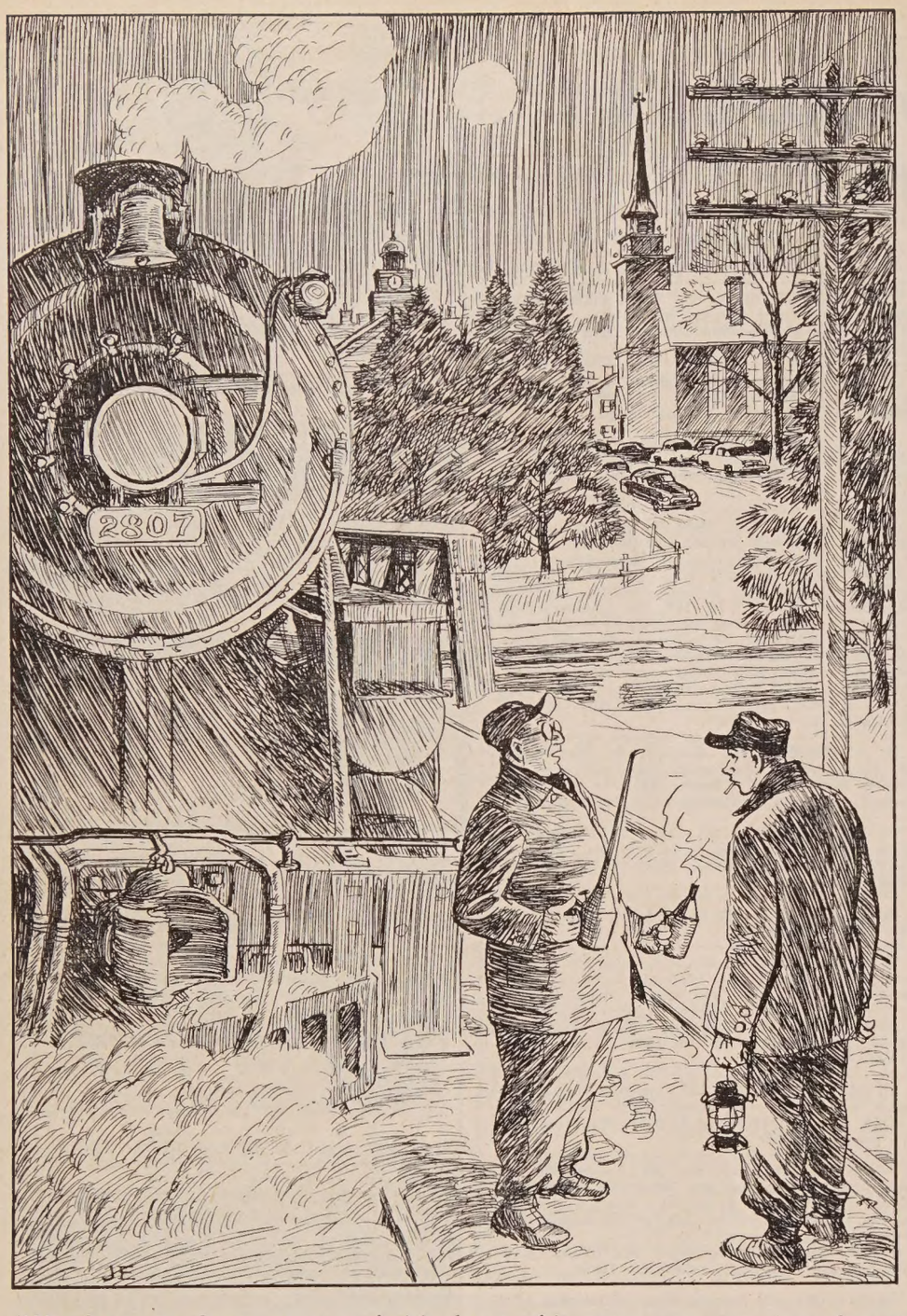

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BOB NIGHTINGALE, 1035 Gulf Rd., Elyria, O., wants pix, negs., maps, drawings, info., emp. tts., etc., any size and sort, any Western n.g. road. Will correspond with anyone interested in same.

(R) HENRY O'CONNOR, 1153 Guerrere St., San Francisco, Calif., will sell 111 misc. issues *Railroad Magazine*, 1935-'52, all good cond., for best offer for lot. Also 23 mis. issues *Trains* and 7 mis. *Model Railroaders*; details, 3c stamp.

(*) J. O'MEARA, 3615 E. 29th Ave., Vancouver, B. C., Canada, wants good negs. or photos. of elec. and streetcar lines.

(*) R. OTTERSTEIN, 1942 S. 57th St., Philadelphia, Pa., will buy rail and juice items: marker lights, switch lights, whistles, bells, punches, etc.

(R) GEO. PATTY, 926½ W. 4th St., Waterloo, Ia., will sell all *Railroad Magazines* 1938-'52, good cond., $30. exp. coll.; also 1916 *Car Builders Dict.*, good cond., $12. exp. coll.

(*) STAN PAULSON, 4336 16th Ave., S., Minneapolis 7, Minn., will trade bus and trolley transfs., schedules, token.

(*) DAVID PERRY, Box D, Templeton, Mass., announced NRHS, Boston Chapter, presents *The New England Sampler*, album of New England trolleys, 32 pages, 5x7, 58 photos with data; heavy paper, $1, out about Sept. 15.

Pfc. W. L. REDDY, 734½ Manitou Ave., Manitou Springs, Colo., will trade short line rosters; has limited number; wants lumber and logging rosters, U. S. and Canada.

(*) SY REICH, 92 St. Marks Pl., New York 9, N. Y., sells pix and negs., NYCTA, PSCT, NYNH&H, NYC, LIRR, PRR, SIRT, Queensboro trolleys, CNJ, Rdg., B&O, Erie, NYS&W, PTC, PSTC, RRRR, P&W.

A. R. SHADE, Jr., RFD 2, Columbia Station, O., will sell steam pix. of AT&SF, B&A, B&O, B&M, NYC, PRR, many others; list and sample 10c; also juice pix, many lines.

MILES STILLE, Jr., 1024 E. Jean St., Tampa, Fla., has size 120 negs. of ACL and SAL diesels, trade or sell. ACL fans, write.

(*) RAY SHETLER, 297 Penn St., Pasadena 6, Calif., has pix SP, UP, PE, LATL, AT&SF, and few tts. and trsfs., sell or swap for PE pix. List and sample, 10c.

DWIGHT SMITH, Jr., RFD 1, Suncook, N. H., sells size 620 negs. B&M, CV, StJ&LC, CNR, CPR steam locos. List, 3c.

(*) JAMES STEWART, 587 E. Cheltenham Ave., Philadelphia 20, Pa., will buy 35 mm. color slides trolley or interurban lines. Send lists first.

(R) RAY VECCHIE, Box 582, Kincaid, Ill., will buy *Railroad Magazines* prior to '36, good cond., with covers; also used copy *Mixed Train Daily*.

DICK WALLIN, 664 Hawbrook Ave., Kirkwood 22, Mo., sells size 620 pix, mostly steam, some diesel, West and Midwest; list and sample, 10c.

(*) GARY WILSON, 353 Penn St., Pasadena, Calif., sells pix PE, SLG&W, Bamberger list and sample 10c. Also list and sample of UP, SP, AT&SF, 10c; PE for WCF&N photos.

AL ZUBER, 8528 89th St., Woodhaven 21, N. Y., will sell to top bidder *Model Railroader* from Jan. '34 to date; some bound; all good cond.

MODEL TRADING POST

ANTON BRUNS, 10740 Woodbine St., Palms, Los Angeles 34, Calif., buys locos, cars, HO 2-rail DC and O27 3-rail AC.

BILL CLARK, Jr., 2 Acton Pl., Annapolis, Md., will trade Lionel 3-rail No. 227 0-6-0 switcher or O72 *Hiawatha*, both good cond., for frt. cars 714, 715, 716, 717.

D. M. CHRISTISEN, Box 122, Columbia, Mo., will sell or trade various tech. and non tech. railbooks and mags. Will sell HO steam locos. Write for list.

G. S. DAWSON, Box 42, Hico, Tex., will trade 3 Lionel O gage pass. cars, Mantua HO gage Mikado, and HO frt. cars for war relics, all kinds.

WM. DeGROOT, Jr., King Ave., Box 394 B, Baltimore 6, Md., will trade postage stamps, foreign, U. S. mint sets, singles, for st.-gage tr.

FRANK DeSANTIS, 13 State St., Schenectady, N. Y., will sell ¾-in. scale live steamer, 4-6-2, PRR K-4.

ART GILES, 33 Arcadia Lane, Hicksville, N. Y., sells st.-gage locos, cars.

L. GRIER, Morningside Dr., Elmira, N. Y., will swap Record Spin Outfit and RB sun glasses for binoculars, record-player, or model eqpmt.

DR. C. KOWAL, 1846 Cullerton St., Chicago 8, Ill., will sell Buddy L loco and tender, also Lionel 256 twin elec. O gage loco. Encl. stamp.

RONALD LINDNER, 308 1st Ave., N. E., Hampton, Ia., will swap incompl. stamp album which he values at $15 for O27 eqpmt. Wants to hear from Frisco fans. Has pix of M&StL, RI, CGW recent diesels.

J. A. LUKAS, 149025 Ash Ave., Flushing, N. Y., will trade compl set self-teaching records of Portuguese, Chinese or Thai language for HO locos, or will sell.

(*) CARL ROBINSON, 7303 Hermitage St., Pittsburgh 8, Pa., will swap Lionel, Ives, AF catalogs, 1924 to date, for old tinplate locos, streetcars, or will sell.

A. D. WELLBORN, Box 1690, Fort Worth 1, Tex., will trade tinplate O gage locos, cars, kits, access., for stamp colls. or photo eqpmt.

(*) PAUL WILLIS, 910 E. Chelten Ave., Philadelphia 38, Pa., will make to order any O gage trolley car model body. Send stamped env. for details; no pc.

C. R. WOODS, Box 224, Wooddale, Ill., will sell new built-up HO eqpmt. or trade toward ¾ in. live steamer 4-4-0 or 4-6-2.

FLAGSTOPS

ANNUAL "Autumn Foliage" fantrip will be held Sunday, October 10, under auspices of NRHS, Buffalo and Rochester chapters, over the Erie, including freight-only branch lines and that portion of the single-track main line between Cuba Jct. and Hornell, N. Y. One special train will leave Buffalo over the Buffalo-Hornell line to Attica, another special leaving Rochester, the two combining into one for latter part of trip. Round trip, from Buffalo, $4.95; from Rochester, $5.95. Contact J. H. Clark, 69 Wendel Ave., Kenmore 23, N. Y.. or F. G. Merz, 135 Lenox St., Rochester.

* * *

A SIMILAR fantrip will be sponsored on the same date by NRHS, Philadelphia chapter, leaving from Reading Terminal at 8:15 A.M., over Reading's Perkiomen Division to Allentown, Pa.; then over Mt. Hope Mineral RR. and Wharton RR. to Green Pond Jct. Round trip, $6. Contact Wm. D. Hooker, 8001 Lare St., Philadelphia 28, Pa.

* * *

FANTRIP Oct. 17 to be sponsored by Toledo Chapter, National Railroad Assn., leaving Toledo Central Union Terminal 9 A.M. by New York Central and transferring at Bryan, O., to the Cincinnati Northern, thence to Jackson, Mich., and back the same way. CN hasn't had passenger service since 1932. Fare: $5 or $6; children half rate. Contact Lloyd Brown, Toledo Trust Co., Toledo, O.

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